

ANSI /MEDBIQ PP.10.1-2008 Healthcare Professional Profile Specifications Document



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Extensible Customer Information Language was reviewed in the creation of this schema. For more information, see: http://www.oasis-open.org/committees/ciq/ciq.html#7.

Introduction

This document describes the MedBiquitous Healthcare Professional Profile XML Schema in detail. It is intended for use by any one who wants to create, implement, or create interoperable tools for XML profiles based on this specification. The status of the document is indicated at the bottom of the page; draft documents are subject to review and approval through the MedBiquitous Standards Program Operating Procedures (see http://www.medbiq.org/working_groups/consortium_process/MedBiquitousANSIProcess.pdf).

The objective of this Healthcare Professional Profile Schema is to provide a data structure that allows one to represent one or more healthcare professionals or members of professional medical societies in a standard format. This structure then enables the exchange of profile information between related business systems and over the Web.

The MedBiquitous Consortium is charged with creating an XML framework for professional medical societies that will enable them to collaborate to advance medical education and professional competence assessment. Societies are based on the concept of membership; it touches every aspect of their business. Societies often exchange member information with third-party vendors and publishers. In addition, many certifying and licensing boards need to communicate clinician profile information with their umbrella entities or partner organizations. The Professional Profile facilitates these transactions as well.

Many societies are coming together into web community portals around a single medical specialty. Within each community, a user may belong to one or more professional medical societies. The Professional Profile reflects this view of membership: an individual may be a member of multiple organizations.

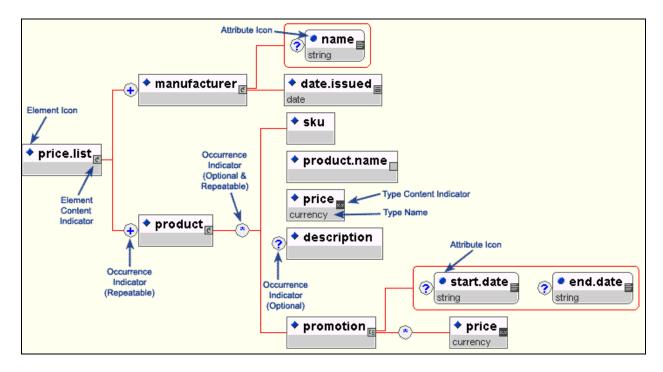
Documentation Conventions

This document uses the following conventions.

Documentation Conventions

Convention	Description
monospaced type	Sample XML tags, code, schema, or portion thereof
BoldText	When used with an XML tag name, indicates that the element contains sub-elements
Italicized Text	When used in an XML tag description, an attribute of the XML tag.
Tag description	Shading indicated that the tag is further described in another part of the document or in another specifications document

The following graphical standards are used for the XML diagrams in this document.



Graphical Standards from TIBCO's Turbo XML, Copyright TIBCO Software Inc.

Data Elements

The Professional Profile schema includes the following data elements. In most cases, these elements contain subelements.

- 1. Members
- 2. Member
- 3. UniqueID
- 4. Name
- 5. Address
- 6. EducationInfo
- 7. TrainingInfo
- 8. CertificationInfo
- 9. LicenseInfo
- 10. DisciplinaryInfo
- 11. AcademicAppointmentInfo
- 12. OccupationInfo
- 13. PersonalInfo
- 14. MembershipInfo
- 15. XtensibleInfo

The root element is Members.

Other Schema Referenced

This Professional Profile schema imports and refers to the MedBiquitous Name Schema and the MedBiquitous Address Schema. Both are available from the MedBiquitous XML Repository at http://www.medbiq.org/repository.

Professional Profile schemas are also available online at: http://ns.medbiq.org/member/v1/member.zip

Professional Profile XML Schema Grammar

The following sections explain the Professional Profile XML Schema grammar. Values in **bold** under XML Tags column indicate that the element has sub-elements.

The XML schema is available online at http://ns.medbiq.org/member/v1/.

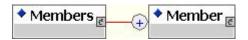
Datatypes not otherwise defined in the document, such as date, refer to datatypes defined within the XML 1.0 technical specification. For information on these datatypes, see the W3C Extensible Markup Language (XML) 1.0 (Fourth Edition).

All the elements having sub-elements will be defined in separate sections. All elements without sub-elements will be defined within the appropriate element sections that use them.

1 Members

Members is the root element. It contains professional profile information for one or more members of a community. Members must occur once within a professional profile.

Members has the sub-element Member, which describes professional profile information for a single person.

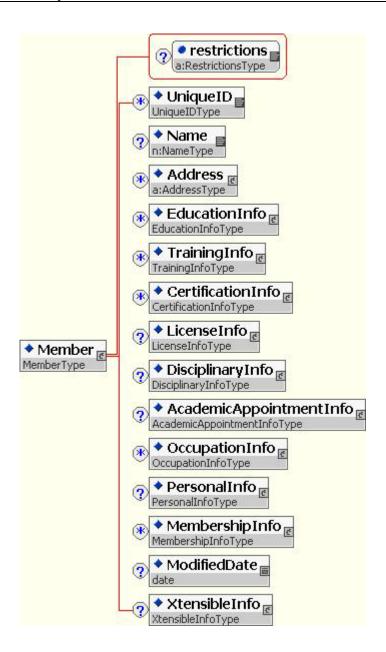


Example:

2 Member

Member is the subelement of Members that contains all member profile information elements for a single user within a community. Member must occur at least once within a member profile.

Member has a series of sub-elements that are defined in this document.



Member Information

iviember information				
Element	Description	Required	Multiplicity	Datatype
Member	Member is the subelement of Members. It contains sub- elements that define profile information for a single user or healthcare professional within a community.	Required	1 or more	Container
	Member has the following attribute:			
	restrictions Indicates whether this member record is to be			

Element	Description	Required	Multiplicity	Datatype
	unrestricted, restricted, or confidential when sharing information with partner organizations or the general public. Valid values are: Unrestricted, Restricted, Confidential.			
	Unrestricted indicates that a piece of data may be shared or published.			
	Restricted indicates that a piece of data may be shared in some instances, but not published. Policies must be defined surrounding the use of restricted data.			
	Confidential indicates that a piece of data may not be shared or published.			
UniqueID	UniqueID is the subelement of Member. It defines a unique alphanumeric identifier for the member.	Optional	0 or more	Non-null String
	UniqueID has the following attribute:			
	domain Defines the community, society, or organization that is the source of the unique id. Use of the domain attribute is required when using the UniqueID element.			
Name	Name is the subelement of Member. Name contains elements that define a person's name in detail. For more information, see the MedBiquitous Name Specifications and Description Document.	Required	1	Container
Address	Address is the subelement of Member. Address contains elements that define an address in detail. For more information, see the MedBiquitous Address Specifications and Description Document.	Optional	0 or more	Container
EducationInfo	EducationInfo is the	Optional	0 or more	Container

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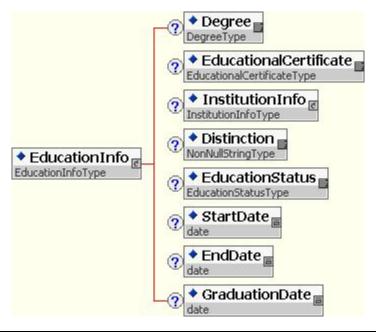
Element	Description	Required	Multiplicity	Datatype
	subelement of Member. EducationInfo contains elements that define the educational background for a member, including bachelor's degree and medical degree. See section EducationInfo for more information.			
TrainingInfo	TrainingInfo is the subelement of Member. TrainingInfo contains elements that define a medical professional's postgraduate training, including residency and fellowship. See section TrainingInfo for more information.	Optional	0 or more	Container
CertificationInfo	CertificationInfo is the subelement of Member. CertificationInfo contains elements that define a medical professional's certification from a medical specialty board, such as the American Board of Internal Medicine. See section CertificationInfo for more information.	Optional	0 or more	Container
LicenseInfo	LicenseInfo is the subelement of Member. LicenseInfo contains elements that describe the professional licenses helf by an individual. See section LicenseInfo for more information.	Optional	0 or 1	Container
DisciplinaryInfo	DisciplinaryInfo is the subelement of Member. DisciplinaryInfo contains elements that describe any licensing board actions or notices for an individual. See section DisciplinaryInfo for more information.	Optional	0 or 1	Container
AcademicAppointmentInfo	AcademicAppointmentInfo is the subelement of Member. AcademicAppointmentInfo contains elements that describe any academic appointments. See section AcademicAppointmentInfo for more information.	Optional	0 or 1	Container

Element	Description	Required	Multiplicity	Datatype
OccupationInfo	OccupationInfo is the subelement of Member. OccupationInfo contains elements that define a medical professional's occupation. See section OccupationInfo for more information.	Optional	0 or more	Container
PersonalInfo	PersonalInfo is the subelement of Member. PersonalInfo contains elements that define personal information about a member. See section PersonalInfo for more information.	Optional	0 or 1	Container
MembershipInfo	MembershipInfo is the subelement of Member. MembershipInfo contains elements that define a user's membership in professional medical societies and related organizations. See section MembershipInfo for more information.	Optional	0 or more	Container
ModifiedDate	ModifiedDate is the subelement of Member and defines the date that this member record was last updated.	Optional	0 or 1	Date
XtensibleInfo	XtensibleInfo is the subelement of Member. XtensibleInfo contains subelements defined by the organization implementing the schema. See section XtensibleInfo for more information.	Optional	0 or 1	Container

```
<a:StateOrProvince>MD</a:StateOrProvince>
      <a:PostalCode>21287</a:PostalCode>
      <a:Country>
         <a:CountryCode>US</a:CountryCode>
      </a:Country>
   </Address>
   <EducationInfo>
   </EducationInfo>
   <TrainingInfo>
   </TrainingInfo>
   <CertificationInfo>
   </CertificationInfo>
   <OccupationInfo>
      . . .
   </OccupationInfo>
   <PersonalInfo>
   </PersonalInfo>
   <MembershipInfo>
   </MembershipInfo>
   <ModifiedDate>2003-12-04</ModifiedDate>
</Member>
```

3 EducationInfo

The EducationInfo element defines the educational background for a user, including bachelor's degree and medical degree. This element breaks educational information into more detail. EducationInfo is a sub-element of Member.



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EducationInfo Element Information

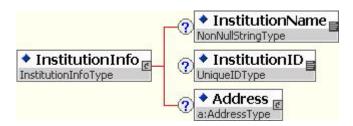
Element	Description	Required	Multiplicity	Datatype
EducationInfo	This is the sub-element of the root element Member. This element has sub-elements that define the user's degrees and certifications.	Optional	0 or more	Container
Degree	This is the sub-element of the EducationInfo element. It defines the degree received. For example, Bachelor of Arts, MD. This is not a controlled list.	Optional	0 or 1	Non-null String
	This element provides the following attributes:			
	discipline Defines the academic discipline for the degree received. For example, Engineering, Chemistry, etc.			
Certificate	This is the sub-element of the EducationInfo element. It defines the certificate received. For example, Perfusionist. This is not a controlled list.	Optional	0 or 1	Non-null String
	This element provides the following attributes:			
	type Defines the type of certificate. For example, Professional, HighSchool, etc.			
InstitutionInfo	This is the sub-element of the EducationInfo element. This element has sub-elements that define the certificate or degreegranting institution in detail. See section InstitutionInfo for more information.	Optional	0 or 1	Container
Distinction	This is the sub-element of the EducationInfo element. This element defines any distinctions received. For example, CumLaude, Honors, etc.	Optional	0 or 1	Non-null String
EducationStatus	This is the sub-element of the EducationInfo element. It defines that staus of the individual in relation to the educational program. Valid values include: Active, Graduated, Leave of Absence, Withdrawn, Dismissed, and Deceased.	Optional	0 or 1	Restricted

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Element	Description	Required	Multiplicity	Datatype
StartDate	This is the sub-element of the EducationInfo element and defines the date the user started this degree or certificate program.	Optional	0 or 1	Date
	StartDate has the following attribute:			
	accuracy defines which parts of a date are accurate. Valid values are: DayMonthYear, MonthYear, and Year.			
EndDate	This is the sub-element of the EducationInfo element and defines the date the user completed or ended this degree or certificate program.	Optional	0 or 1	Date
	EndDate has the following attribute:			
	accuracy defines which parts of a date are accurate. Valid values are: DayMonthYear, MonthYear, and Year.			
GraduationDate	This is the sub-element of the EducationInfo element and defines the individual's scheduled graduation date for this degree or certificate program.	Optional	0 or 1	Date
	GraduationDate has the following attribute:			
	accuracy defines which parts of a date are accurate. Valid values are: DayMonthYear, MonthYear, and Year.			

3.1 InstitutionInfo

The InstitutionInfo element defines the name and address for a medical or educational institution. This element breaks institution information into more detail. InstitutionInfo is a sub-element of EducationInfo and ProgramInfo.



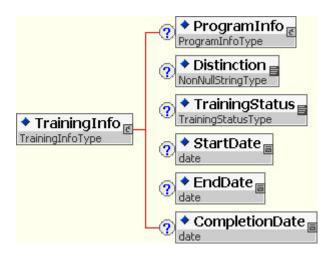
InstitutionInfo Element Information

Element	Description	Required	Multiplicity	Datatype
InstitutionInfo	This is the sub-element of the EducationInfo and ProgramInfo elements. It contains elements that define an institution's name and address.	Optional	0 or 1	Container
InstitutionName	This is the sub-element of the InstitutionInfo element. It defines the name of a medical or educational institution. For example, Johns Hopkins School of Medicine.	Optional	0 or 1	Non-null String
InstitutionID	This is the sub-element of the InstitutionInfo element. It defines a unique alphanumeric identifier for the institution.	Optional	0 or 1	Non-null string
	This element has one attribute:			
	domain Defines defines the organization that is the source of the unique identifier.			
Address	This is the sub-element of the InstitutionInfo element. It defines the institution address. See the MedBiquitous Address Specifications and Description Document for more information.	Optional	0 or 1	Container

Example:

4 TrainingInfo

The TrainingInfo element defines a medical professional's post-graduate training, including residency and fellowship. This element breaks training information into more detail. TrainingInfo is a sub-element of Member.



TrainingInfo Element Information

Elements	Description	Required	Multiplicity	Datatype
TrainingInfo	This is the sub-element of the root element Member. This element has sub-elements that define the user's post-graduate training.	Optional	0 or more	Container
ProgramInfo	This is the sub-element of the TrainingInfo element. This element has sub-elements that define the post-graduate program in detail.	Optional	0 or 1	Container

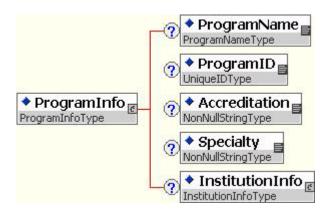
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Elements	Description	Required	Multiplicity	Datatype
	See the ProgramInfo Section for more information.			
Distinction	This is the sub-element of the TrainingInfo element. Distinction defines any distinctions received. For example, ChiefResident, etc.	Optional	0 or 1	Non-null String
TrainingStatus	This is the sub-element of the TrainingInfo element. It defines the individual's status within the training program. Valid values include: Year X (where X is a valid digit), Completed Preliminary Training, Completed Specialty Training, Leave of Absence, Withdrawn, Dismissed, and Deceased.	Optional	0 or 1	Restricted
StartDate	This is the sub-element of the TrainingInfo element and defines the date the user started this training program.	Optional	0 or 1	Date
	StartDate has the following attribute:			
	accuracy defines which parts of a date are accurate. Valid values are: DayMonthYear, MonthYear, and Year.			
EndDate	This is the sub-element of the TrainingInfo element and defines the date the individual completed or ended this training program.	Optional	0 or 1	Date
	EndDate has the following attribute:			
	accuracy defines which parts of a date are accurate. Valid values are: DayMonthYear, MonthYear, and Year.			
CompletionDate	This is the sub-element of the TrainingInfo element and defines the individual's completion date for this training program.	Optional	0 or 1	Date
	CompletionDate has the following attribute:			
	accuracy defines which parts of a date are accurate. Valid values are: DayMonthYear, MonthYear, and Year.			

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4.1 ProgramInfo

The ProgramInfo element contains sub-elements that define detailed information about a post-graduate medical program, including name, accreditation, medical specialty, and institution. ProgramInfo is a sub-element of TrainingInfo.



ProgramInfo Element Information

Element	Description	Required	Multiplicity	Datatype
ProgramInfo	This is the sub-element of the TrainingInfo element. It contains sub-elements that define detailed information about a post-graduate medical program.	Optional	0 or more	Container
ProgramName	This is the sub-element of the ProgramInfo element. This element defines the name of the post-graduate program. For example, Johns Hopkins Emergency Medicine Residency Program.	Optional	0 or 1	Non-null String
	This element provides the following attribute:			

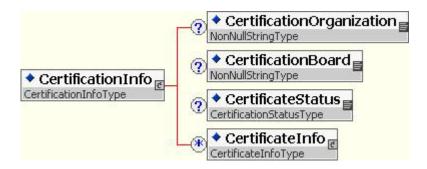
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Element	Description	Required	Multiplicity	Datatype
	type Defines the type of post-graduate program. Possible values are: Residency, Fellowship, Other.			
ProgramID	This is the sub-element of the ProgramInfo element. It defines a unique alphanumeric identifier for the training program.	Optional	0 or 1	Non-null string
	This element has one attribute:			
	domain Defines defines the organization that is the source of the unique identifier.			
Accreditation	This is the sub-element of the ProgramInfo element and defines the accrediting organization for this program. For example, ACGME.	Optional	0 or 1	Non-null String
Specialty	This is the sub-element of the ProgramInfo element and defines the medical specialty of the program. For example, Cardiology.	Optional	0 or 1	Non-null String
InstitutionInfo	This is the sub-element of the ProgramInfo element. This element has sub-elements that define the certificate or degree-granting institution in detail. See section InstitutionInfo for more information.	Optional	0 or 1	Container

```
<ProgramInfo>
   <ProgramName>Stanford-Kaiser Emergency Medicine Residency Program
   </ProgramName>
   <Accreditation>ACGME</Accreditation>
   <Specialty>Emergency Medicine/Specialty>
   <InstitutionInfo
      <InstitutionName>Stanford School of Medicine</InstitutionName>
      <Address>
         <a:StreetAddressLine>300 Pasteur Drive</a:StreetAddressLine>
         <a:City>Stanford</a:City>
         <a:StateOrProvince>CA</a:StateOrProvince>
         <a:PostalCode>94305</a:PostalCode>
         <a:Country>
            <a:CountryCode>US</a:CountryCode>
         </a:Country>
      </Address>
   </InstitutionInfo>
</ProgramInfo>
```

5 CertificationInfo

The CertificationInfo element defines a medical professional's certification from a medical specialty board, such as the American Board of Internal Medicine. This element breaks certification information into more detail. CertificationInfo is a sub-element of Member.



CertificationInfo Element Information

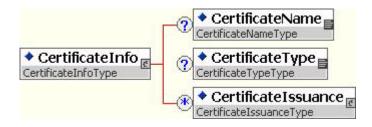
Elements	Description	Required	Multiplicity	Datatype
CertificationInfo	This is the sub-element of Member. This element has sub-elements that define the user's medical specialty certification.	Optional	0 or more	Container
CertificationOrganization	This is the sub-element of CertificationInfo. CertificationOrganization defines the organization certifying the certification board. For example, American Board of Medical Specialties.	Optional	0 or 1	Non-null String
CertificationBoard	This is the sub-element of CertificationInfo. CertificationBoard defines the board certifying the medical professional. For example, American Board of Pediatrics.	Optional	0 or 1	Non-null String
CertificateStatus	This subelement of CertificationInfo identifies the current status of the individual's specialty certification. Valid values are: Active, Inactive, Expired, Revoked, Suspended, and Surrendered.	Optional	0 or 1	Restricted

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Elements	Description	Required	Multiplicity	Datatype
CertificateInfo	This is the sub-element of CertificationInfo. CertificateInfo contains subelements that define a particular certification held by the medical professional.	Optional	0 or more	Container

5.1 CertificateInfo

CertificateInfo contains subelements that define a particular certification held by the medical professional. For example, Internal Medicine or Geriatric Medicine are both certifications issued by the American Board of Internal Medicine.



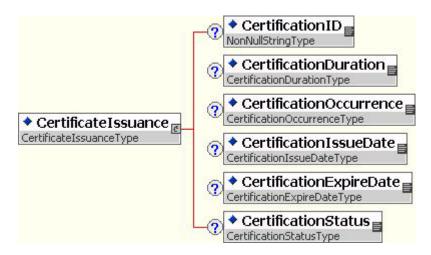
CertificateInfo Element Information

Elements	Description	Required	Multiplicity	Datatype
CertificateInfo	CertificateInfo contains subelements that define a particular certification held by the medical professional.	Optional	0 or more	Container

Elements	Description	Required	Multiplicity	Datatype
CertificateName	This is the sub-element of the CertificationInfo element and defines the name of the certificate. For example, General Surgery.	Optional	0 or 1	Non-null String
	CertificateName has the following attribute:			
	CertificateID defines the identifier for a type of certificate issued by a specific specialty board. For example, the Sports Medicine Certificate issued by the American Board of Family Practice has a unique identifier distinct from the identifier for the Sport Medicine Certificate issued by the American Board of Emergency Medicine. The Certificate ID is assigned by the Certification Organization, for example, the American Board of Medical Specialties.			
CertificateType	This subelement of CertificationInfo defines the type of certificate. Valid values are: General Certificate, Subcertificate.	Optional	0 or 1	Restricted
CertificateIssuance	This is the subelement of CertificationInfo. CertificateIssuance contains elements that define a specific issuance of a certification.	Optional	0 or more	Container

5.2 CertificateIssuance

CertificateIssuance provides details about specific issuances of a certification. For example, an internist will receive multiple certificates from the American Board of Internal Medicine over the course of his or her career in accordance with the Board's Maintenance of Certification program.



CertificateIssuance Element Information

Elements	Description	Required	Multiplicity	Datatype
CertificateIssuance	This is the subelement of CertificateInfo. CertificateIssuance contains elements that define a specific issuance of certifications for the certificate defined by CertificateName. A physician may have several certifications in the same field, including their initial certifications and recertifications.	Optional	0 or more	Container
CertificationID	This sub-element of Certificatelssuance. CertificationID defines a unique identifier for a specific issuance of a certificate. For example, John Doe's initial certification in ophthalmology would have one certification ID; his recertification in ophthalmology would have a different certification ID.	Optional	0 or 1	Non-null String
CertificationDuration	This is the sub-element of the Certificatelssuance element and defines the duration of the certificate. Valid values include: Lifetime, Time-	Optional	0 or 1	Restricted

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Elements	Description	Required	Multiplicity	Datatype
	limited.			
CertificationOccurrence	This is the sub-element of the Certificatelssuance element. This element describes whether the certificate is an initial certificate or one issued through a recertification process. Valid values are: Initial, Recertification, and Maintenance of Certification.	Optional	0 or 1	Restricted
CertificationIssueDate	This is the sub-element of the Certificatelssuance element and specifies the date the certificate was issued.	Optional	0 or 1	Date
	CertificationIssueDate has the following attribute:			
	accuracy defines which parts of a date are accurate. Valid values are: DayMonthYear, MonthYear, and Year.			
CertificationExpireDate	This is the sub-element of the Certificatelssuance element and specifies the date the certificate will expire.	Optional	0 or 1	Date
	CertificationExpireDate has the following attribute:			
	accuracy defines which parts of a date are accurate. Valid values are: DayMonthYear, MonthYear, and Year.			
CertificationStatus	CertificationStatus is the subelement of CertificateIssuance and defines whether or not a certification is active. Valid values are Active, Inactive, Expired, Revoked, Suspended, and Surrendered.	Optional	0 or 1	Restricted

<CertificateIssuance>

<CertificationID>55555555</CertificationID>

<CertificationDuration>Time-limited</CertificationDuration>

<CertificationOccurrence>Recertification/CertificationOccurrence>

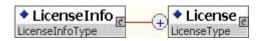
<CertificationIssueDate>1998-12-31</CertificationIssueDate>

<CertificationExpireDate>2008-12-31/CertificationExpireDate>

<CertificationStatus>Active</CertificationStatus>
</CertificateIssuance>

6 Licenselnfo

The LicenseInfo element describes the professional licenses held by a healthcare professional. This element contains other elements that provide details on each license held. LicenseInfo is a subelement of Member.



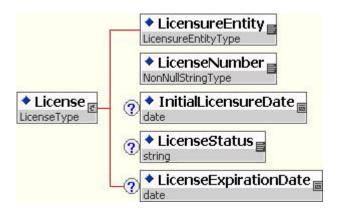
LicenseInfo Element Information

Elements	Description	Required	Multiplicity	Datatype
LicenseInfo	This is the subelement of Member. LicenseInfo contains elements that describe the professional licenses held by a healthcare professional.	Optional	0 or more	Container
License	This is the subelement of LicenseInfo. License contains subelements that describe a health professions license issued by a government board. For information, see section License.	Required	1 or more	Container

Example:

6.1 License

License describes a health professions license issued by a government board.



License Element Information

Elements	Description	Required	Multiplicity	Datatype
License	This is the subelement of LicenseInfo. License contains subelements that describe a health professions license issued by a government board.	Yes	1 or more	Container
LicensureEntity	This is the subelement of License. LicensureEntity defines the government entity issuing the license.	Yes	1	Non-null String
	LicensureEntity has the following attributes:			
	code A code defining the licensure entity.			
	domain Defines the community, society, or organization that is the source of the code.			
LicenseNumber	This is the subelement of License. LicenseNumber is the alphanumeric string that identifies this issuance of the license.	Yes	1	Non-null String
InitialLicensureDate	This is the subelement of License. InitialLicensureDate defines the date that this individual was initially licensed by this licensing entity.	No	0 or 1	Date
LicenseStatus	This is the subelement of License. LicenseStatus defines the current status of the license. For example, Active, Inactive.	No	0 or 1	Non null string

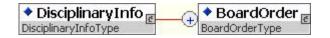
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Elements	Description	Required	Multiplicity	Datatype
LicenseExpirationDate	This is the subelement of License. LicenseExpirationDate defines the date the current licese will expire.	No	0 or 1	Date

```
<License>
     <LicensureEntity code = "MD01">
          Maryland Board of Physicians
     </LicensureEntity>
          <LicenseNumber>12345654123</LicenseNumber>
          <InitialLicensureDate>1995-06-30</InitialLicensureDate>
          <LicenseStatus>Active</LicenseStatus>
          <LicenseExpirationDate>2010-06-30</LicenseExpirationDate>
</License>
```

7 DisciplinaryInfo

The DisciplinaryInfo element describes any disciplinary actions or notices for the healthcare professional issued by a licensing board. DisciplinaryInfo contains subelements that describe this information in detail. DisciplinaryInfo is a subelement of Member.



DisciplinaryInfo Element Information

Elements	Description	Required	Multiplicity	Datatype
DisciplinaryInfo	DisciplinaryInfo is the subelement of Member. DisciplinaryInfo contains elements that describe any licensing board actions or notices for an individual.	No	0 or 1	Container
BoardOrder	BoardOrder is the subelement of DisciplinaryInfo. BoardOrder contains detailed information about a board notice or action. See section BoardOrder for more information.	Yes	1 or more	Date

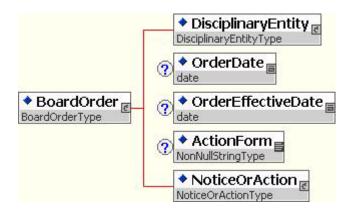
Example:

```
<DisciplinaryInfo>
<BoardOrder>
```

• • •

7.1 BoardOrder

BoardOrder describes a board notice or disciplinary action in detail.



BoardOrder Element Information

Elements	Description	Required	Multiplicity	Datatype
BoardOrder	BoardOrder is the subelement of DisciplinaryInfo. BoardOrder contains detailed information about a board notice or action.	Yes	1 or more	Container
DisciplinaryEntity	DisciplinaryEntity is the subelement of BoardOrder. It contains subelements that define the entity issuing the board notice or action. For more information, see the section DisciplinaryEntity.	Yes	1	Container
OrderDate	The date the order wasa issued. OrderDate is the subelement of BoardOrder.	No	0 or 1	Date
OrderEffectiveDate	The date the order is effective. OrderEffectiveDate OrderDate is the subelement of BoardOrder.	No	0 or 1	Date
ActionForm	The type of legal form consitituting the notice or action. For example: Affadavit, Death notice, etc. ActionForm is the subelement	No	0 or 1	Non null string

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Elements	Description	Required	Multiplicity	Datatype
	of BoardOrder.			
NoticeOrAction	NoticeOrAction is the subelement of BoardOrder. It contains elements that define a notice or action in detail. For more information, see the section NoticeOrAction.	Yes	1	Container

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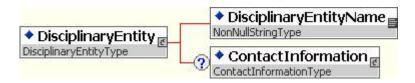
Version: 1.0

Status: Approved Standard

Date: 27 June 2008
Page: 33

7.2 DisciplinaryEntity

DisciplinaryEntity describes the disciplinary entity in detail.



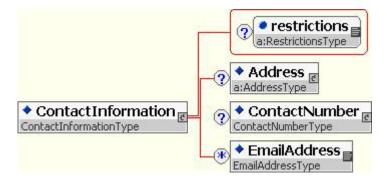
DisciplinaryEntity Element Information

Elements	Description	Required	Multiplicity	Datatype
DisciplinaryEntity	DisciplinaryEntity is the subelement of BoardOrder. It contains subelements that define the entity issuing the board notice or action.	Yes	1	Container
DisciplinaryEntityName	Name is a subelement of DisciplinaryEntity. It defines the name of the entity issuing the board notice or action.	Yes	1	Non null string
	Name has the following attribute:			
	code A code identifying the disciplinary entity.			
	domain Defines the community, society, or organization that is the source of the code.			

Elements	Description	Required	Multiplicity	Datatype
ContactInformation	ContactInformation is the subelement of DisciplinaryEntity. It provides detailed contact information for th disciplinary entity. For more information, see section ContactInformation.	No	0 to 1	Container

7.3 ContactInformation

ContactInformation provides detailed contact information for the disciplinary entity.



ContactInformation Element Information

Elements	Description	Required	Multiplicity	Datatype
ContactInformation	ContactInformation is the subelement of DisciplinaryEntity. It provides detailed contact information for th disciplinary entity.	No	0 or 1	Container
	ContactInformation has the following attribute:			
	restrictions Indicates whether contact information is to be unrestricted, restricted, or confidential when sharing information with partner organizations or the general public. Valid values are: Unrestricted, Restricted, Confidential.			
	Unrestricted indicates that a piece of data may be shared or published.			
	Restricted indicates that a piece of data may be shared in some instances, but not published. Policies must be defined surrounding the use of restricted data.			
	Confidential indicates that a piece of data may not be shared or published.			
Address	Address is the subelement of ContactInformation. Address contains elements that define an address in detail. For more information, see the MedBiquitous Address Specifications and Description Document.	No	0 or 1	Container
ContactNumber	ContactNumber is the subelement of PersonalInfo. ContactNumber contains elements that define a person's telephone, fax, and pager numbers. For more information, see section ContactNumber.	No	0 or 1	Container

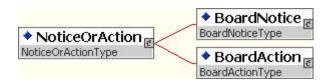
Elements	Description	Required	Multiplicity	Datatype
EmailAddress	This element is the sub- element of the ContactInformation element. EmailAddress defines a person's email address.	Optional	0 or more	Email address (string@ string.string or string <string@string.string>)</string@string.string>
	Email addresses must conform with the IETF RFC 2822 standard. For example:			
	pshelley@nosuchmail.com			
	Percy Shelley <pshelley@nosuchmail.com></pshelley@nosuchmail.com>			
	EmailAddress has one attribute:			
	restrictions Indicates whether this email address is to be unrestricted, restricted, or confidential when sharing information with partner organizations or the general public. Valid values are: Unrestricted, Restricted, Confidential.			
	Unrestricted indicates that a piece of data may be shared or published.			
	Restricted indicates that a piece of data may be shared in some instances, but not published. Policies must be defined surrounding the use of restricted data.			
	Confidential indicates that a piece of data may not be shared or published.			

Version: 1.0

```
<ContactInformation>
   <Address>
      <a:StreetAddressLine> 2601 North 3rd Street</a:StreetAddressLine>
      <a:City>Harrsiburg</a:City>
      <a:StateOrProvince>PA</a:StateOrProvince>
      <a:Country>
         <a:CountryCode>US</a:CountryCode>
      </a:Country>
   </Address>
   <ContactNumber>
      <CountryCode>1</CountryCode>
      <TelephoneNumber>7177871212</TelephoneNumber>
      <Description>Office</Description>
   </ContactNumber>
   <EmailAddress>ST-MEDICINE@state.pa.us</EmailAddress>
</ContactInformation>
```

7.4 NoticeOrAction

NoticeOrAction contains subelements that describe a board notice or disciplinary action.



NoticeOrAction Element Information

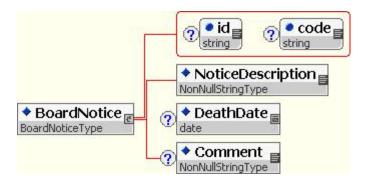
Elements	Description	Required	Multiplicity	Datatype
NoticeOrAction	NoticeOrAction is the subelement of BoardOrder. It contains elements that define a notice or action in detail.	Yes	1	Container
BoardNotice	BoardNotice is the subelement of NoticeOrAction. Its subelements define a board notice in detail. For more information, see section BoardNotice.	Either BoardNotice or BoardAction is required	0 or 1	Container
BoardAction	BoardAction is the subelement of NoticeOrAction. Its subelements define a board action in detail. For more information, see section BoardAction.	Either BoardNotice or BoardAction is required	0 or 1	Container

Example:

Or:

7.5 BoardNotice

BoardNotice provides a detailed description of a board notice.

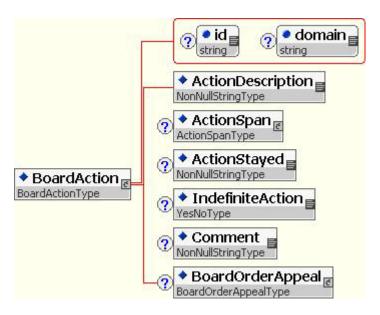


BoardNotice Element Information

Elements	Description	Required	Multiplicity	Datatype
BoardNotice	BoardNotice is the subelement of NoticeOrAction. Its subelements define a board notice in detail.	Either BoardNotice or BoardAction is required	0 or 1	Container
	BoardNotice has the following attributes:			
	id A unique identifier describing the notice.			
	domain Defines the community, society, or organization that is the source of the id.			
NoticeDescription	NoticeDescription is the subelement of BoardNotice. It provides a description of the board notice issued.	Yes	1	Non null string
DeathDate	DeathDate is the subelement of BoardNotice. It provides the date of death indicated on the board notice, if applicable.	No	0 or 1	Date
Comment	Comment is the subelement of BoardNotice. It provides additional commentary on the notice.	No	0 or 1	Non null string

7.6 BoardAction

BoardAction has subelements that describe a disciplinary action in detail.



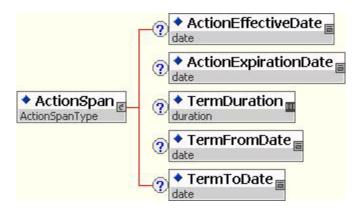
BoardAction Element Information

Elements	Description	Required	Multiplicity	Datatype
BoardAction	BoardAction is the subelement of NoticeOrAction. Its subelements define a board action in detail.	Either BoardNotice or BoardAction is required	0 or 1	Container
	BoardAction has the following attributes:			
	idA unique identifierdescribing the action.			
	domain Defines the community, society, or organization that is the source of the code.			

Elements	Description	Required	Multiplicity	Datatype
ActionDescription	ActionDescription is the subelement of BoardNotice. It provides a description of the board action issued.	Yes	1	Non null string
ActionSpan	ActionSpan is a subelement of BoardAction. It defines the effective dates or term of the action. For more information, see section ActionSpan.	No	1	Container
ActionStayed	ActionStayed is a subelement of BoardAction. It indicates whether the action has been stayed.	No	0 or 1	Non null string (change to non null in schema)
IndefiniteAction	IndefiniteAction is a subelement of BoardAction. It indicates whether the action has been deemed indefinite.	No	0 or 1	Restricted (Yes or No)
Comment	Comment is the subelement of BoardAction. It provides additional commentary on the action.	No	0 or 1	Non null string
BoardOrderAppeal	BoardOrderAppeal is the subelement of BoardAction. It contains subelements that define any appeals proceeding brought against the action. For more information, see section BoardOrderAppeal.	No	0 or 1	Container

7.7 ActionSpan

ActionSpan defines the effective dates or term of a disciplinary action.

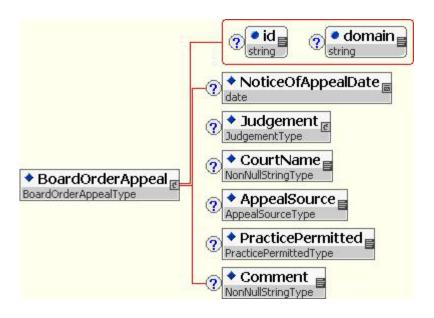


ActionSpan Element Information

Elements	Description	Required	Multiplicity	Datatype
ActionSpan	ActionSpan is a subelement of BoardAction. It defines the effective dates or term of the action.	Yes	1	Container
ActionEffectiveDate	ActionEffectiveDate is a subelement of Expiration. It defines the date the action is effective.	Yes	1	Date
ActionExpirationDate	ActionExpirationDate is a subelement of Expiration. It defines the date the action expires.	Yes	1	Date
TermDuration	TermDuration is the subelement of Term. It defines the duration of the action term.	Yes	1	Duration
TermFromDate	TermFromDate is the subelement of Term. It defines the date the term of the action begins.	Yes	1	Date
TermToDate	TermToDate is the subelement of Term. It defines the date the term of the action ends.	Yes	1	Date

```
<ActionSpan>
     <TermDuration>P10Y</TermDuration>
     <TermFromDate>2006-04-15</TermFromDate>
     <TermToDate>2016-04-14</TermToDate>
</ActionSpan>
```

7.8 BoardOrderAppeal



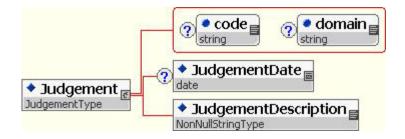
BoardOrderAppeal Element Information

Elements	Description	Required	Multiplicity	Datatype
BoardOrderAppeal	BoardOrderAppeal is the subelement of BoardAction. It contains subelements that define any appeals proceeding brought against the action.	No	0 or 1	Container
	<i>id</i> A unique identifier describing the appeal.			
	domain Defines the community, society, or organization that is the source of the code.			
NoticeOfAppealDate	NoticeOfAppealDate is the subelement of BoardOrderAppeal. It indicates the date of the appeal notice.	No	0 or 1	Date

Elements	Description	Required	Multiplicity	Datatype
Judgement	Judgement is the subelement of BoardOrderAppeal. It contains subelements that provide detailed information about the appeal judgement. For more information, see section Judgement.	No	0 or 1	Container
CourtName	CourtName is the subelement of BoardOrderAppeal. It indicates the name of the court hearing the appeal and providing the judgement.	No	0 or 1	Non null string
AppealSource	AppealSource is the subelement of BoardOrderAppeal. It indicates the source of the appeal.	No	0 or 1	Non null string
	AppealSource has the following attribute:			
	code A code defining the type of entity appealing the action.			
	domain Defines the community, society, or organization that is the source of the code.			
PracticePermitted	PracticePermitted is the subelement of BoardOrderAppeal. It indicates whether the individual is permitted to practice under the terms of the appeal.	No	0 or 1	Non null string
	code A code defining the type of practice permitted.			
	domain Defines the community, society, or organization that is the source of the code.			
Comment	Comment is the subelement of BoardOrderAppeal. It provides additional commentary on the appeal.	No	0 or 1	Non null string

7.9 Judgement

Judgement provides detailed information about the appeal judgement.



Judgement Element Information

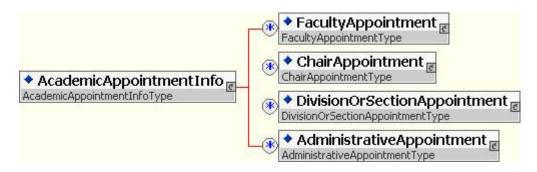
Elements	Description	Required	Multiplicity	Datatype
Judgement	Judgement is the subelement of BoardOrderAppeal. It contains subelements that provide detailed information about the appeal judgement.	No	0 or 1	Container
	codeA code defining the type of judgement.			
	domain Defines the community, society, or organization that is the source of the code.			
JudgementDate	JudgementDate is the subelement of Judgement. It provides the date of the judgement.	No	0 or 1	Date

Elements	Description	Required	Multiplicity	Datatype
JudgementDescription	JudgementDescription is the subelement of Judgement. It provides a text description of the judgement.	Yes	0 or 1	Non null string

```
<Judgement>
   <JudgementDate>2005-10-15</JudgementDate>
   <JudgementDescription>
       Physician was assessed a civil penalty of $1,000 for failing
       to submit proof of continuing medical education.
   </JudgementDescription>
</Judgement>
```

AcademicAppointmentInfo

The Academic Appointment Info element defines any academic appointments held by a healthcare professional. It provides detailed information about academic appointments. Academic appointments may also be described using OccupationInfo (particularly if the academic position is the individual's primary occupation), but OccupationInfo provides a less detailed description. An appointment may be described using both AcademicAppointmentInfo and OccupationInfo if desired.



AcademicAppointmentInfo Element Information

Elements	Description	Required	Multiplicity	Datatype
AcademicAppointmentInfo	AcademicAppointmentInfo is the subelement of Member. AcademicAppointmentInfo contains elements that describe any academic appointments held by an individual.	No	0 or 1	Container

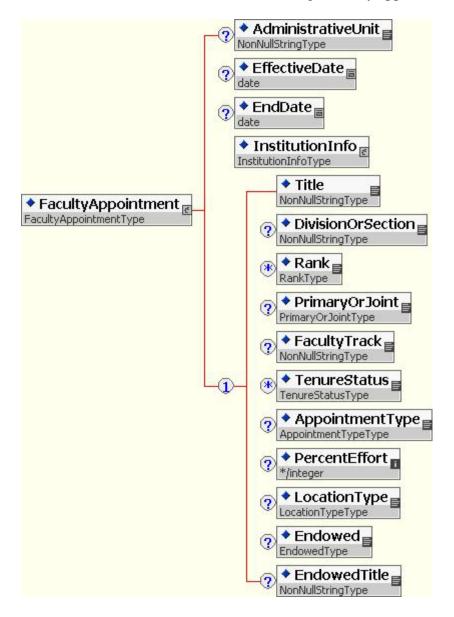
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Date: 27 June 2008

Elements	Description	Required	Multiplicity	Datatype
FacultyAppointment	FacultyAppointment is the subelement of AcademicAppointmentInfo. It contains subelements that describe an individual's faculty appointments in detail. For more information, see section FacultyAppointment.	No	0 or more	Container
ChairAppointment	ChairAppointment is the subelement of AcademicAppointmentInfo. It contains subelements that describe an individual's appointment as chair of a department or chief of a division or section in detail. For more information, see section ChairAppointment.	No	0 or more	Container
DivisionOrSectionAppointment	DivisionOrSectionAppointment is the subelement of AcademicAppointmentInfo. It contains subelements that describe an individual's appointment within a division or section of an academic department in detail. For more information, see section DivisionOrSectionAppointment.	No	0 or more	Container
AdministrativeAppointment	AdministrativeAppointment is the subelement of AcademicAppointmentInfo. It contains subelements that describe an individual's administrative appointment within a school, hospital, or Veterans Administration organization in detail. For more information, see section AdministrativeAppointment.	No	0 or more	Container

8.1 FacultyAppointment

FacultyAppointment contains subelements that describe a single faculty appointment in detail.



FacultyAppointment Element Information

Elements	Description	Required	Multiplicity	Datatype
FacultyAppointment	FacultyAppointment is the subelement of AcademicAppointmentInfo. It contains subelements that describe a single faculty appointment in detail.	No	0 or more	Container

Elements	Description	Required	Multiplicity	Datatype
AdministrativeUnit	AdministrativeUnit is the subelement of FacultyAppointment. AdministrativeUnit identifies the academic department for this appointment. For example, Department of Surgery.	No	0 or 1	NonNull String
EffectiveDate	EffectiveDate is the subelement of FacultyAppointment. It defines the start date for this appointment.	No	0 or 1	Date
EndDate	EndDate is the subelement of FacultyAppointment. It defines the end date for this appointment.	No	0 or 1	Date
InsitutionInfo	This element is the subelement of FacultyAppointment. It has subelements that define the institution in detail. See section InstitutionInfo for more information.	Yes	1	Container
Title	Title is the subelement of FacultyAppointment. It defines the official title of the academic appointment at the institution. For example, Professor.	Yes	1	NonNull String
DivisionOrSection	DivisionOrSection is the subelement of FacultyAppointment. It identifies the academic division or section within the department applicable for this appointment. For example, Cardiology.	No	0 or 1	NonNull String
Rank	Rank is the subelement of FacultyAppointment. It defines an academic rank associated with this appointment. The Rank element may be repeated to describe a rank progression related to this appointment. If more than one rank is specified, list the current rank first. Valid values are: Professor, Associate Professor, Assistant Professor, Instructor, Lecturer.	No	0 or 1	Restricted
	Rank has the following attribute: effectiveDate The date the the rank described became effective.			

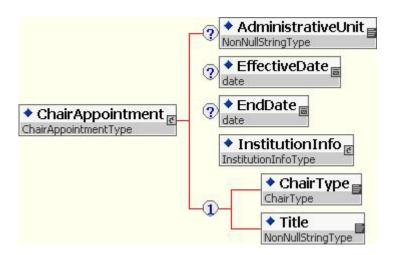
Elements	Description	Required	Multiplicity	Datatype
PrimaryOrJoint	PrimaryOrJoint is the subelement of FacultyAppointment. It indicates whether the appointment is a primary appointment or joint appointment. Valid values are: Primary, Joint.	No	0 or 1	Restricted
FacultyTrack	FacultyTrack is the subelement of FacultyAppointment. It describes the faculty track for this appointment.	No	0 or 1	NonNull String
TenureStatus	TenureStatus is the subelement of FacultyAppointment. It describes a current or past tenure status of the individual as related to this appointment. The TenureStatus element may be repeated to describe a progression in tenure status related to this appointment. If more than one tenure status is specified, list the current tenure status first. Valid values are: Tenured, Tenure Eligible Track, Not Tenure Eligible Track, Tenure Not Available.	No	0 or more	Restricted
	TenureStatus has the following attribute:			
	effectiveDate The date the tenure status described became effective.			
AppointmentType	AppointmentType is the subelement of FacultyAppointment. It describes the nature of the appointment. Valid values are: Full-time, Parttime, Volunteer, and Emeritus.	No	0 or 1	Restricted
PercentEffort	PercentEffort is the subelement of FacultyAppointment. It describes the percentage of time for appointments that require part-time effort. Valid values are integers between 1 and 100.	No	0 or 1	Integer 1-100
LocationType	LocationType is the subelement of FacultyAppointment. It describes the type of location for this faculty appointment. Valid values are: School-based, Hospital-based, VA-based.	No	0 or 1	Restricted

Elements	Description	Required	Multiplicity	Datatype
Endowed	Endowed is the subelement of FacultyAppointment. Endowed indicates whether or not this appointment is an endowed appointment. Valid Values are Yes and No.	No	0 or 1	Restricted
EndowedTitle	EndowedTitle is the subelement of FacultyAppointment. It defines the title of the endowed appointment. For example, William Stewart Halsted Professor of Surgery.	No	0 or 1	NonNull String

```
<FacultyAppointment>
   <AdministrativeUnit>Department of Surgery</AdministrativeUnit>
   <EffectiveDate>2001-01-30</EffectiveDate>
   <InstitutionInfo>
      <InstitutionName>University of Pittsburgh</InstitutionName>
      <Address>
         <a:City>Pittsburgh</a:City>
         <a:StateOrProvince>Pennsylvania</a:StateOrProvince>
         <a:Country>
            <a:CountryCode>US</a:CountryCode>
         </a:Country>
      </Address>
   </InstitutionInfo>
   <Title>Assistant Professor of Medicine</Title>
   <Rank>Assistant Professor</Rank>
   <PrimaryOrJoint>Primary</PrimaryOrJoint>
   <TenureStatus>Tenure Eligible Track</TenureStatus>
   <AppointmentType>Full-time</AppointmentType>
   <LocationType>School-based</LocationType>
   <Endowed>No</Endowed>
</FacultyAppointment>
```

Chair Appointment

ChairAppointment describes an individual's appointment as chair of a department or chief of a division or section in detail.



ChairAppointment Element Information

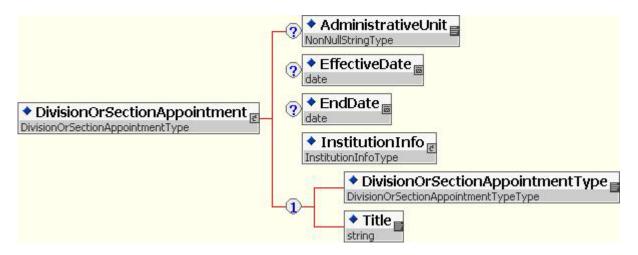
Elements	Description	Required	Multiplicity	Datatype
ChairAppointment	ChairAppointment is the subelement of AcademicAppointmentInfo. It contains subelements that describe an individual's appointment as chair of a department in detail.	No	0 or more	Container
AdministrativeUnit	AdministrativeUnit is the subelement of ChairAppointment. AdministrativeUnit identifies the academic department for this appointment. For example, Department of Surgery.	No	0 or 1	NonNull String
EffectiveDate	EffectiveDate is the subelement of ChairAppointment. It defines the start date for this appointment.	No	0 or 1	Date
EndDate	EndDate is the subelement of ChairAppointment. It defines the end date for this appointment.	No	0 or 1	Date

Elements	Description	Required	Multiplicity	Datatype
InstitutionInfo	This element is the subelement of ChairAppointment. It has sub-elements that define the institution in detail. See section InstitutionInfo for more information.	Yes	1	Container
ChairType	ChairType is the subelement of ChairAppointment. It defines the type of chair appointment held. Valid values are: Chair and Cochair.	Yes	1	Restricted
	ChairType has one attribute:			
	term Indicates the permanence of the term of office. Valid values are: acting, interim, and permanent.			
Title	Title is the subelement of ChairAppointment. It defines the official title of the appointment at the institution. For example, Chairman, Department of Medicine.	Yes	1	NonNull string

```
<ChairAppointment>
         <AdministrativeUnit>Department of Surgery</AdministrativeUnit>
         <EffectiveDate>2001-01-30</EffectiveDate>
         <InstitutionInfo>
            <InstitutionName>Oregon Health and Science
University</InstitutionName>
            <Address>
               <a:City>Portland</a:City>
               <a:StateOrProvince>Oregon</a:StateOrProvince>
               <a:Country>
                  <a:CountryCode>US</a:CountryCode>
               </a:Country>
            </Address>
         </InstitutionInfo>
         <ChairType term="permanent">Chair</ChairType>
         <Title>Chairman, Department of Surgery</Title>
      </ChairAppointment>
```

8.3 DivisionOrSectionAppointment

DivisionOrSectionAppointment describe's an individual's appointment within an academic section or divison of a department.



DivisionOrSectionAppointment Element Information

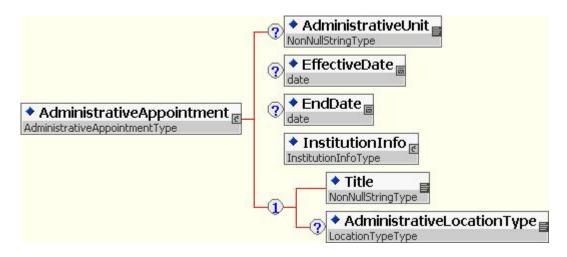
Elements	Description	Required	Multiplicity	Datatype
DivisionOrSectionAppointment	DivisionOrSectionAppointment is the subelement of AcademicAppointmentInfo. It contains subelements that describe an individual's appointment within a division or section of an academic department in detail.	No	0 or more	Container
AdministrativeUnit	AdministrativeUnit is the subelement of DivisionOrSectionAppointment. AdministrativeUnit identifies the academic division or section for this appointment. For example, Neonatology Division.	No	0 or 1	NonNull string
EffectiveDate	EffectiveDate is the subelement of DivisionOrSectionAppointment. It defines the start date for this appointment.	No	0 or 1	Date
EndDate	EndDate is the subelement of DivisionOrSectionAppointment. It defines the end date for this appointment.	No	0 or 1	Date

Elements	Description	Required	Multiplicity	Datatype
InstitutionInfo	This element is the subelement of ChairAppointment. It has sub-elements that define the institution in detail. See section InstitutionInfo for more information.	Yes	1	Container
DivisionOrSectionAppointmentType	DivisionOrSectionAppointmentType is the subelement of DivisionOrSectionAppointment. It defines the type of appointment held. Valid values are: Chief and Co-chief.	Yes	1	Restricted
	DivisionOrSectionAppointmentType has one attribute:			
	term Indicates the permanence of the term of office. Valid values are: acting, interim, and permanent.			
Title	Title is the subelement of DivisionOrSectionAppointment. It defines the official title of the appointment at the institution. For example, Director, Division of Rheumatology.	Yes	1	NonNull string

8.4 AdministrativeAppointment

Administrative Appointment describes an individual's administrative appointment within a school, hospital, or Veterans Administration organization in detail.

AdministrativeAppointment is not intended to describe chair of division or section chief appointments. To describe department chair appointments, use the Chair Appointment element. To describe division or section chief appointments, use the DivisionOrSectionAppointment element.



AdministrativeAppointment Element Information

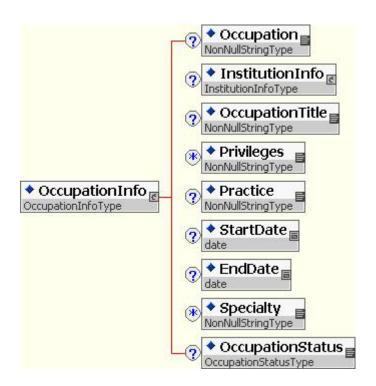
Elements	Description	Required	Multiplicity	Datatype
AdministrativeAppointment	AdministrativeAppointment is the subelement of AcademicAppointmentInfo. It contains subelements that describe an individual's administrative appointment in detail.	No	0 or more	Container
AdministrativeUnit	AdministrativeUnit is the subelement of AdministrativeAppointment. AdministrativeUnit identifies the administrative unit for this appointment. For example, Legal Department.	No	0 or 1	NonNull String
EffectiveDate	EffectiveDate is the subelement of AdministrativeAppointment. It defines the start date for this appointment.	No	0 or 1	Date
EndDate	EndDate is the subelement of AdministrativeAppointment. It defines the end date for this appointment.	No	0 or 1	Date
InstitutionInfo	This element is the subelement of AdministrativeAppointment. It has sub-elements that define the institution in detail. See section InstitutionInfo for more information.	Yes	1	Container

Elements	Description	Required	Multiplicity	Datatype
Title	Title is the subelement of AdministrativeAppointment. It defines the official title of the administrative appointment. For example, Vice Dean.	Yes	1	NonNull String
AdministrativeLocationType	AdministrativeLocationType is the subelement of AdministrativeAppointment. It defines the location of the administrative appointment. Valid values are: Schoolbased, Hospital-based, VAbased.	No	0 or 1	Restricted

```
<AdministrativeAppointment>
         <AdministrtiveUnit>Office of Educational
Affairs</AdministrativeUnit>
         <EffectiveDate>2002-06-30</EffectiveDate>
         <InstitutionInfo>
            <InstitutionName>Tufts University</InstitutionName>
            <Address>
               <a:City>Boston</a:City>
               <a:StateOrProvince>Massachussets</a:StateOrProvince>
               <a:Country>
                  <a:CountryCode>US</a:CountryCode>
               </a:Country>
            </Address>
         </InstitutionInfo>
         <Title>Dean for Educational Affairs</Title>
         <AdministrativeAppointmentType>
           School-based
         </AdministrativeAppointmentType>
      </AdministrativeAppointment>
```

9 OccupationInfo

The OccupationInfo element defines a medical professional's occupation. This element breaks occupation information into more detailed elements. AcademicAppointmentInfo may also be used to describe an individual's academic appointments in greater detail. An appointment may be described using both AcademicAppointmentInfo and OccupationInfo if desired. OccupationInfo is a sub-element of Member.



OccupationInfo Element Information

Elements	Description	Required	Multiplicity	Datatype
OccupationInfo	This is the sub-element of the Member element. This element has sub-elements that define a user's occupation with specific elements for physician occupations.	Optional	0 or more	Container
Occupation	This is the sub-element of the OccupationInfo element. This element defines a user's occupation as a free-format text field.	Optional	0 or 1	Non-null string
InstitutionInfo	This is the sub-element of the OccupationInfo element. This element has sub-elements that define the user's institution in detail. See section InstitutionInfo for more information.	Optional	0 or 1	Container
OccupationTitle	This is the sub-element of the OccupationInfo element. It defines the user's official title within the institution or practice.	Optional	0 or 1	Non-null String
Privileges	This is the sub-element of the OccupationInfo element. It defines the privileges that a user has at the institution listed.	Optional	0 or more	Non-null String

Elements	Description	Required	Multiplicity	Datatype
Practice	This is the sub-element of the OccupationInfo element. It defines the name of a medical professional's practice. For example, Doyle Eye Associates.	Optional	0 or 1	Non-null String
StartDate	This is the sub-element of the OccupationInfo element and defines the date the user started working in this practice or institution.	Optional	0 or 1	Date
EndDate	This is the sub-element of the OccupationInfo element and defines the date the user stopped working at this practice or institution.	Optional	0 or 1	Date
Specialty	This is the sub-element of the OccupationInfo element and defines the medical specialty of the user. For example, Cardiology.	Optional	0 or more	Non-null String
OccupationStatus	This is the sub-element of the OccupationDetails element; the status element may occur once and is optional. Valid values are: retired, active.	Optional	0 or 1	Restricted

<OccupationInfo>

<Occupation>Family Physician</Occupation>

<OccupationTitle>Director</OccupationTitle>

<Practice>Springfield Family Practice

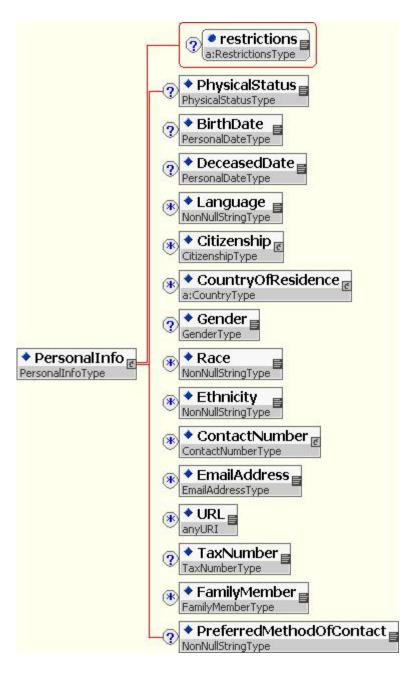
<Specialty>Family Practice

<0ccupationStatus>Active</0ccupationStatus>

</OccupationInfo>

10 PersonalInfo

The PersonalInfo element defines personal information about a user. This element breaks personal information into more detailed elements. PersonalInfo is a sub-element of Member.



PersonalInfo Element Description

Element	Description	Required	Multiplicity	Datatype
PersonalInfo	The PersonalInfo element has sub-elements to define personal information in detail.	Optional	0 or 1	Container
	PersonalInfo has one attribute:			
	restrictions Indicates whether personal information is to be unrestricted, restricted, or confidential when sharing information with partner organizations or the general public. Valid values are: Unrestricted, Restricted, Confidential.			
	Unrestricted indicates that a piece of data may be shared or published.			
	Restricted indicates that a piece of data may be shared in some instances, but not published. Policies must be defined surrounding the use of restricted data.			
	Confidential indicates that a piece of data may not be shared or published.			
PhysicalStatus	This element is a sub-element of PersonalInfo element and defines the physical status of the person. Valid values are: Living, Deceased.	Optional	0 or 1	Restricted

Element	Description	Required	Multiplicity	Datatype
BirthDate	BirthDate is a sub-element of PersonalInfo and defines a person's birth date.	Optional	0 or 1	Date
	BirthDate has the following attributes:			
	accuracy defines which parts of a date are accurate. Valid values are: DayMonthYear, MonthYear, and Year.			
	restrictions Indicates whether the birth date is to be unrestricted, restricted, or confidential when sharing information with partner organizations or the general public. Valid values are: Unrestricted, Restricted, Confidential.			
	Unrestricted indicates that a piece of data may be shared or published.			
	Restricted indicates that a piece of data may be shared in some instances, but not published. Policies must be defined surrounding the use of restricted data.			
	Confidential indicates that a piece of data may not be shared or published.			

Element	Description	Required	Multiplicity	Datatype
DeceasedDate	DeceasedDate is a sub-element of PersonalInfo and indicates the date of death for the individual.	Optional	0 or 1	Date
	DeceasedDate has the following attributes:			
	accuracy defines which parts of a date are accurate. Valid values are: DayMonthYear, MonthYear, and Year.			
	restrictions Indicates whether the deceased date is to be unrestricted, restricted, or confidential when sharing information with partner organizations or the general public. Valid values are: Unrestricted, Restricted, Confidential.			
	Unrestricted indicates that a piece of data may be shared or published.			
	Restricted indicates that a piece of data may be shared in some instances, but not published. Policies must be defined surrounding the use of restricted data.			
	Confidential indicates that a piece of data may not be shared or published.			
Language	Language is a sub-element of PersonalInfo and defines a language a person speaks, reads, or writes.	Optional	0 or more	Non-null String

Element	Description	Required	Multiplicity	Datatype
Citizenship	This element is the sub-element of the PersonalInfo element. Citizenship contains subelements that define the nation of citizenship of an individual. Citizenship extends the CountryType datatype, which contains CountryName and CountryCode subelements. See the MedBiquitous Address Specifications and Description Document for more information.	Optional	0 or more	Container
	Citizenship has one attribute:			
	pointInTime Allows the schema to describe citizenship at multiple points in time. Valid values are: entry to medical school, birth, and current.			
CountryOfReside nce	This element is the sub-element of the PersonalInfo element. CountryofResidence contains elements that describe the country of residence for an individual. CountryofResidence uses the CountryType datatype, which contains CountryName and CountryCode subelements. See the MedBiquitous Address Specifications and Description Document for more information.	Optional	0 or more	Container
Gender	This element is the sub-element of the PersonalInfo element. Gender defines the gender of the person. Valid values are: Male, Female.	Optional	0 or 1	Restricted
Race	This element is the sub-element of the PersonalInfo element. Race defines a population group or classification usually based on physical characteristics.	Optional	0 or more	Non-null string
Ethnicity	This element is the sub-element of the PersonalInfo element. Ethnicity defines a population group based on culture, religion, language, nationality, or race.	Optional	0 or more	Non-null string

Element	Description	Required	Multiplicity	Datatype
ContactNumber	This element is the sub-element of the PersonalInfo element. It contains elements that describe a person's telephone, fax, and pager numbers. See the section ContactNumber for more information.	Optional	0 or more	Container
EmailAddress	This element is the sub-element of the PersonalInfo element. EmailAddress defines a person's email address.	Optional	0 or more	Email address (string@ string.string
	Email addresses must conform with the IETF RFC 2822 standard. For example:			or string <string@str ing.string>)</string@str
	pshelley@nosuchmail.com			
	Percy Shelley <pshelley@nosuchmail.com></pshelley@nosuchmail.com>			
	EmailAddress has one attribute:			
	restrictions Indicates whether this email address is to be unrestricted, restricted, or confidential when sharing information with partner organizations or the general public. Valid values are: Unrestricted, Restricted, Confidential.			
	Unrestricted indicates that a piece of data may be shared or published.			
	Restricted indicates that a piece of data may be shared in some instances, but not published. Policies must be defined surrounding the use of restricted data.			
	Confidential indicates that a piece of data may not be shared or published.			
URL	This element is the sub-element of the PersonalInfo element. URL defines the location for a web page or site for this person. For example, http://www.johnsmithmd.com.	Optional	0 or more	URI

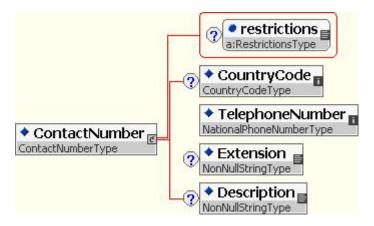
Element	Description	Required	Multiplicity	Datatype
TaxNumber	This element is the sub-element of the PersonalInfo element. TaxNumber defines tax number such as social security number, for the individual.	Optional	0 or 1	Non-null String
	TaxNumber has the following attributes:			
	type Defines the type of tax number. For example, Social Security Number or Social Insurance Number.			
	restrictions Indicates whether the tax number is to be unrestricted, restricted, or confidential when sharing information with partner organizations or the general public. Valid values are: Unrestricted, Restricted, Confidential.			
	Unrestricted indicates that a piece of data may be shared or published.			
	Restricted indicates that a piece of data may be shared in some instances, but not published. Policies must be defined surrounding the use of restricted data.			
	Confidential indicates that a piece of data may not be shared or published.			
FamilyMember	This element is the sub-element of the PersonalInfo element. FamilyMember defines a member of the individual's family.	Optional	0 or more	Non-null String
	relationship Relationship defines the family member's relationship to the individual that is profiled. For example, husband.			
PreferredMethod OfContact	This element is the sub-element of the PersonalInfo element. PreferredMethodOfContact defines the preferred method of contact for this individual. For example, cellphone, telephone, fax, pager, email, postal.	Optional	0 or 1	Non-null String

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```
<PersonalInfo>
      <PhysicalStatus>Living</PhysicalStatus>
      <BirthDate accuracy="DayMonthYear" restrictions = "Unrestricted" >1960-
12-05</BirthDate>
      <Language>English</Language>
      <Citizenship>
         <a:CountryCode>US</a:CountryCode>
      </Citizenship>
      <Gender>Male</Gender>
      <ContactNumber>
         <CountryCode>1</CountryCode>
         <TelephoneNumber>4105551212</TelephoneNumber>
         <Description>Office</Description>
      </ContactNumber>
      <EmailAddress>pbshelley@nosuchmail.org</EmailAddress>
      <TaxNumber type="Social Security Number" restrictions= "Confidential">
888-88-8888</TaxNumber>
      <PreferredMethodOfContact>email</preferredMethodOfContact>
   </PersonalInfo>
```

10.1 ContactNumber

The ContactNumber element contains subelement that define a person's telephone, fax, and pager numbers. ContactNumber is a subelement of PersonalInfo.



ContactNumber Element Information

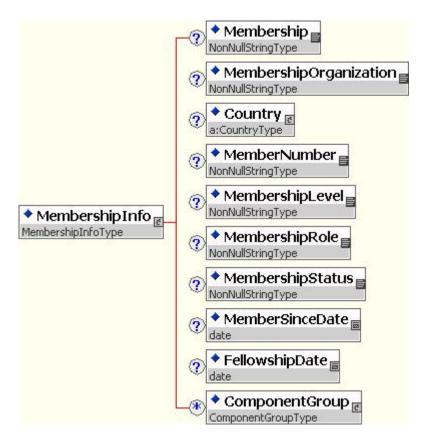
Element	Description	Required	Multiplicity	Datatype
ContactNumber	ContactNumber is the subelement of PersonalInfo. ContactNumber contains elements that define a person's telephone, fax, and pager numbers.	Optional	0 or more	Container
	ContactNumber has one attribute:			
	restrictions Indicates whether this contact number is to be unrestricted, restricted, or confidential when sharing information with partner organizations or the general public. Valid values are: Unrestricted, Restricted, Confidential.			
	Unrestricted indicates that a piece of data may be shared or published.			
	Restricted indicates that a piece of data may be shared in some instances, but not published. Policies must be defined surrounding the use of restricted data.			
	Confidential indicates that a piece of data may not be shared or published.			
CountryCode	CountryCode is the subelement of ContactNumber. CountryCode defines the numeric telephone code used to reach telephone numbers within a particular country. For example, 44.	Optional	0 or 1	Integer of up to 3 digits
TelephoneNumber	TelephoneNumber is the subelement of ContactNumber. TelephoneNumber defines a telephone, fax, or pager number, including area or city code.	Required	1	Integer of up to 14 digits
Extension	Extension is the subelement of ContactNumber. Extension defines a telephone extension used to reach an individual.	Optional	0 or 1	Non-null String
Description	Description is a subelement of ContactNumber and defines the type of telephone number. For example, home, business, fax, pager, or mobile.	Optional	0 or 1	Non-null String

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```
<ContactNumber>
     <CountryCode>44</CountryCode>
     <TelephoneNumber>2076115555</TelephoneNumber>
     <Description>Fax</Description>
</ContactNumber>
```

11 MembershipInfo

The MembershipInfo element defines a user's membership in professional medical societies and related organizations. This element breaks membership information into more detailed elements. MembershipInfo is a sub-element of Member.



MembershipInfo Element Information

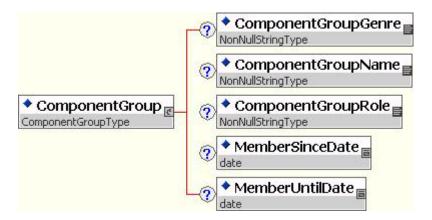
Element	Description	Required	Multiplicity	Datatype
MembershipInfo	This is the sub-element of the Member element. MembershipInfo has sub-elements that define the user's membership in societies and organizations.	Optional	0 or 1	Container

Element	Description	Required	Multiplicity	Datatype
Membership	This is the sub-element of the MembershipInfo element. Membership defines membership in a single society or organization in a free-format text field.	Optional	0 or 1	Non-null String
MembershipOrganization	This is the sub-element of the MembershipInfo element. MembershipOrganization element defines the name of the organization to which to user belongs. For example, American Academy of Ophthalmology. This element provides the following attribute:	Optional	0 or 1	Non-null String
	OrganizationID Defines a unique, alphanumeric identification for the organization that MedBiquitous Consortium establishes.			
Country	This is the sub-element of the MembershipInfo element and defines the country of the organization. Country uses the CountryType datatype, which contains CountryName and CountryCode subelements. See the MedBiquitous Address Specifications and Description Document for more information.	Optional	0 or 1	Container
MemberNumber	This is the sub-element of the MembershipInfo element. MemberNumber defines the number used by the organization to identify this member.	Optional	0 or 1	Non-null String
MembershipLevel	This is the sub-element of the MembershipInfo element. MembershipLevel defines the membership level of the member. For example, associate, fellow, etc.	Optional	0 or 1	Non-null String
	This element provides the following attributes:			
	code Defines a code that the organization associates with the membership level.			

Element	Description	Required	Multiplicity	Datatype
MembershipRole	This is the sub-element of the MembershipInfo element. MembershipRole defines the member's role in the organization. For example, President, Secretary General, etc.	Optional	0 or 1	Non-null String
MembershipStatus	This is the sub-element of the MembershipInfo element. MembershipStatus defines a user's membership status within the organization. For example, active, inactive, retired, emeritus, life.	Optional	0 or 1	Non-null String
MemberSinceDate	This is the sub-element of the MembershipInfo element. MemberSinceDate defines the date that the member first joined the organization.	Optional	0 or 1	Date
FellowshipDate	This is the sub-element of the MembershipInfo element. FellowshipDate defines the date that the member became a fellow within the organization.	Optional	0 or 1	Date
ComponentGroup	This is the sub-element of the MembershipInfo element. ComponentInfo has sub-elements that define the organization components to which a member belongs.	Optional	0 or more	Container
	For more information, see section ComponentInfo.			

11.1 ComponentGroup

The ComponentGroup element contains sub-elements that define a user's membership in chapters, special interest groups, and other components of national and international professional medical societies. ComponentGroup is a sub-element of MembershipInfo.



ComponentInfo Element Information

Element	Description	Required	Multiplicity	Datatype
ComponentGroup	This is the sub-element of the MembershipInfo element. ComponentInfo has sub-elements that define the organization components to which a member belongs.	Optional	0 or more	Container
ComponentGroupGenre	This is the subelement of the ComponentGroup element. ComponentGroupGenre defines the type of component to which the user belongs. For example, Chapter, Special Interest Group, Committee, etc.	Optional	0 or 1	Non-null String
ComponentGroupName	This is the sub-element of the ComponentGroup element. ComponentGroupName defines the name of the organization component to which the user belongs. For example, Belgian Chapter, Annual Meeting Program Committee, etc.	Optional	0 or 1	Non-null String

Status: Approved Standard

Element	Description	Required	Multiplicity	Datatype
ComponentGroupRole	This is the sub-element of the ComponentGroup element. ComponentGroupRole defines the member's role in the organization component. For example, Committee Chair, Secretary, etc.	Optional	0 or 1	Non-null String
MemberSinceDate	This is the sub-element of the ComponentGroup element. MemberSinceDate defines the date that the member first joined the organization component.	Optional	0 or 1	Date
MemberUntilDate	This is the sub-element of the ComponentGroup element. MemberUntilDate defines the date that the individual's membership in the organization component expires.	Optional	0 or 1	Date

<ComponentGroup>

- <ComponentGroupGenre>Chapter/ComponentGroupGenre>
- <ComponentGroupName>Minnesota Radiological Society</ComponentGroupName>
- <ComponentGroupRole>President/ComponentGroupRole>
- <MemberSinceDate>1985-01-31/MemberSinceDate>
- <MemberUntilDate>2004-01-30/MemberUntilDate>
- </ComponentGroup>

12 XtensibleInfo

The XtensibleInfo element contains sub-elements defined by the organization implementing the schema. It extends the currently defined schema. Elements listed in XtensibleInfo may be candidates for inclusion in a revision of the MedBiquitous Healthcare Professional Profile. We encourage submission of these ideas to the MedBiquitous Professional Profile Working Group. The group's home page is located at

<u>http://medbiq.org/working_groups/professional_profile/index.html</u> . You can also submit suggestions to info@medbiq.org.

XtensibleInfo is a sub-element of Member.

Sample XML Document

```
<?xml version = "1.0" encoding = "UTF-8"?>
<Members xmlns = "http://ns.medbiq.org/member/v1/"</pre>
xmlns:xsi = "http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation = "http://ns.medbig.org/member/v1/
http://ns.medbiq.org/member/v1/member.xsd"
xmlns:n = "http://ns.medbiq.org/name/v1/"
xmlns:a = "http://ns.medbiq.org/address/v1/">
   <Member>
      <UniqueID domain = "American College of Surgeons">21556222</UniqueID>
      <Name>
         <n:GivenName>Percy</n:GivenName>
         <n:GivenName>Bysshe</n:GivenName>
         <n:FamilyName>Shelley</n:FamilyName>
         <n:Degree>MD</n:Degree>
      </Name>
      <Address>
         <a:StreetAddressLine>Department of Surgery</a:StreetAddressLine>
         <a:StreetAddressLine>600 N. Wolfe Street</a:StreetAddressLine>
         <a:City>Baltimore</a:City>
         <a:StateOrProvince>MD</a:StateOrProvince>
         <a:PostalCode>21287</a:PostalCode>
         <a:Country>
            <a:CountryCode>US</a:CountryCode>
         </a:Country>
      </Address>
      <EducationInfo>
         <Degree>MD</Degree>
         <InstitutionInfo>
            <InstitutionName>Stanford University</InstitutionName>
         </InstitutionInfo>
         <EndDate>1992-06-01</EndDate>
      </EducationInfo>
      <TrainingInfo>
         <ProgramInfo>
            <ProgramName>General Surgery Residency
            <Accreditation>ACGME</Accreditation>
            <Specialty>Surgery</Specialty>
            <InstitutionInfo>
               <InstitutionName>Yale University</InstitutionName>
            </InstitutionInfo>
         </ProgramInfo>
         <Distinction>Chief Resident/Distinction>
         <StartDate>1992-07-01</StartDate>
         <EndDate>1998-06-01</EndDate>
      </TrainingInfo>
      <CertificationInfo>
         <CertificationOrganization>
           American Board of Medical Specialties
         </CertificationOrganization>
         <CertificationBoard>American Board of Surgery</CertificationBoard>
         <CertificateInfo>
```

```
<CertificateName certificateID = "44444">
              General Surgery
            </CertificateName>
            <CertificateType>General Certificate/CertificateType>
            <CertificateIssuance>
               <CertificationID>55555</CertificationID>
               <CertificationDuration>Time-limited</CertificationDuration>
               <CertificationOccurrence>
                 Recertification
               </CertificationOccurrence>
               <CertificationIssueDate accuracy = "DayMonthYear">
                 2004-01-31
               </CertificationIssueDate>
               <CertificationExpireDate accuracy = "DayMonthYear">
                 2011-01-31
               </CertificationExpireDate>
               <CertificationStatus>Active</CertificationStatus>
            </CertificateIssuance>
         </CertificateInfo>
      </CertificationInfo>
      <OccupationInfo>
         <InstitutionInfo>
            <InstitutionName>Johns Hopkins University</InstitutionName>
         </InstitutionInfo>
         <OccupationTitle>Assistant Professor of Surgery</OccupationTitle>
         <OccupationStatus>Active</OccupationStatus>
      </OccupationInfo>
      <PersonalInfo>
         <PhysicalStatus>Living</physicalStatus>
         <Language>English</Language>
         <Citizenship>
            <a:CountryCode>US</a:CountryCode>
         </Citizenship>
         <Gender>Male</Gender>
         <ContactNumber>
            <CountryCode>1</CountryCode>
            <TelephoneNumber>4105551212</TelephoneNumber>
            <Description>Office</Description>
         </ContactNumber>
         <EmailAddress>pbshelley@nosuchmail.org</EmailAddress>
         <PreferredMethodOfContact>email</preferredMethodOfContact>
      </PersonalInfo>
      <MembershipInfo>
         <MembershipOrganization>
           American College of Surgeons
         </MembershipOrganization>
         <MemberNumber>8888888/MemberNumber>
         <MembershipLevel>Fellow</MembershipLevel>
         <MembershipStatus>Active</MembershipStatus>
         <ComponentGroup>
            <ComponentGroupName>Scholarships Committee/ComponentGroupName>
            <ComponentGroupRole>Chair</ComponentGroupRole>
         </ComponentGroup>
      </MembershipInfo>
   </Member>
</Members>
```

References

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IEEE Standard for Learning Object Metadata, 1484.12.1-2002, http://ieeexplore.ieee.org/servlet/opac?punumber=8032

IEEE Standard for Learning Technology-Extensible Markup Language (XML) Schema Definition Language Binding for Learning Object Metadata, 1484.12.3-2005, http://ieeexplore.ieee.org/servlet/opac?punumber=10263

Internet Engineering Task Force RFC 2822 Internet Message Format, http://www.ietf.org/rfc/rfc2822.txt

International Telecommunications Union E.164 The international public telecommunication numbering plan, http://www.itu.int/rec/T-REC-E.164/en

ISO 3166 Codes for the representation of names of countries and their subdivisions, http://www.iso.org/iso/country_codes/iso_3166_code_lists/

MedBiquitous Address Specifications and Description Document v1.0, http://www.medbiq.org/working_groups/professional_profile/AddressSpecification.pdf

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MedBiquitous XML Schema Design Guidelines v1.3, http://www.medbiq.org/technology/tech_architecture/xmldesignguidelines.pdf

Extensible Customer Information Language, http://www.oasis-open.org/committees/ciq/ciq.html#7

Universal Business Language, http://www.oasis-open.org/committees/tc_home.php?wg_abbrev=ubl#technical

W3C Extensible Markup Language (XML) 1.0 (Fourth Edition), http://www.w3.org/TR/xml