

# Curriculum Mapping in an Age of Competency-based Education

Sascha Benjamin Cohen

Director, Strategic Development for Ilios

Chandler Mayfield

Director, Technology Enhanced Learning

University of California San Francisco

School of Medicine



# Overview

- Why do we “manage” curriculum?
- What’s your educational framework?
- How can we plan to be flexible and adaptable?

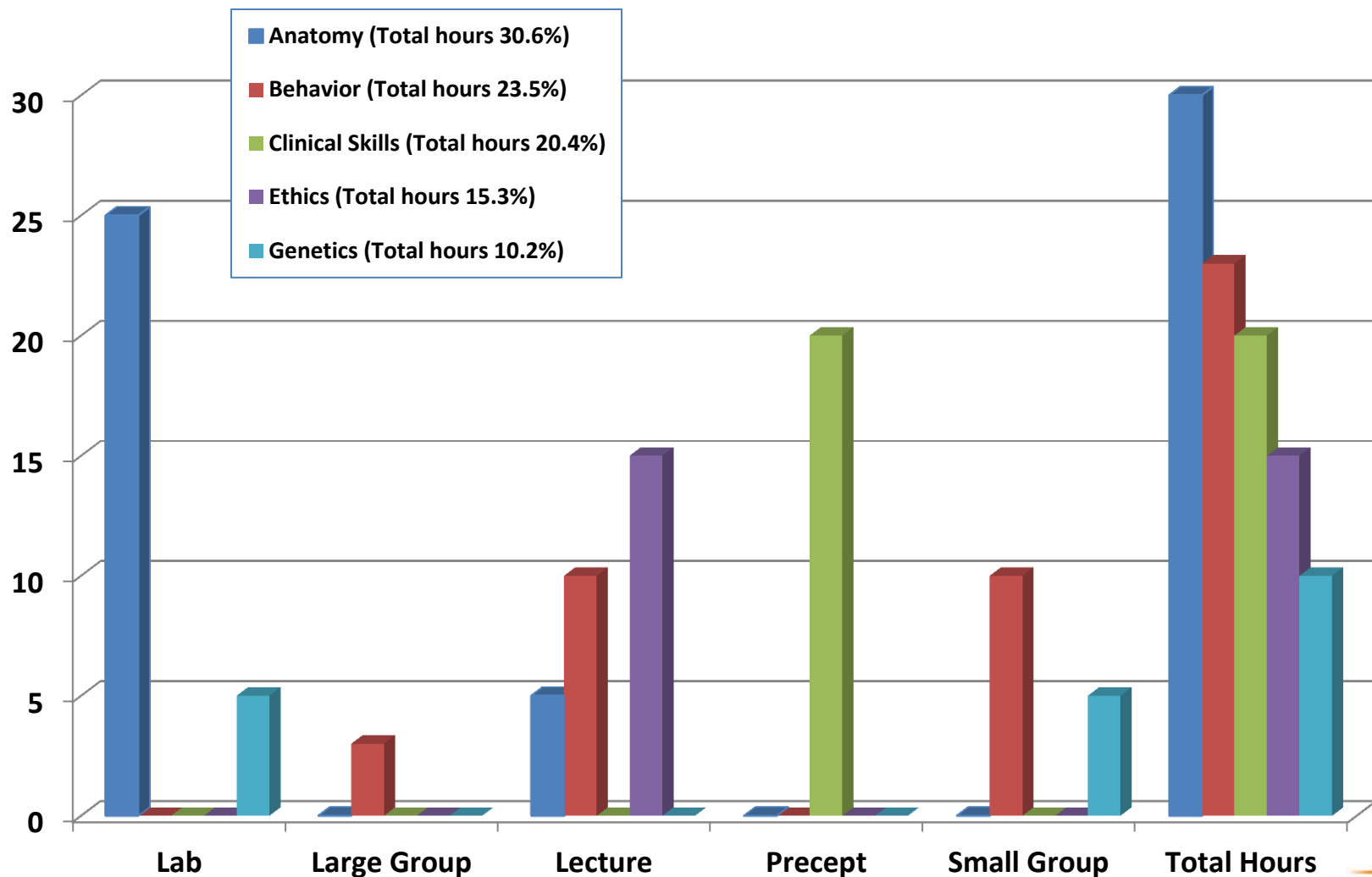


# Why Manage Curriculum?

- Complete and accurate picture –  $W^4+H$
- Benchmarking, teaching effort and reporting
- Identify gaps and unintentional redundancy
- Deliver content to online course
- Build community and educate faculty
- Facilitate interprofessional curriculum
- Facilitate evaluation process



# Teaching Hours By Topic/Modality



# What is your educational framework?

- Courses, Sessions, Activities
- Topics, Learning Modalities, Keywords
- Program Objectives and Course Objectives
- Competencies
  - E.g. ACGME, CanMEDs, The Scottish Doctor, etc.
- Milestones and Entrustable Professional Activities (EPAs)



# Sessions

**ilios2** Home Programs Instructors Learner Groups Courses and Sessions Sascha Cohen Last Login: September 5, 2012 9:47 PDT Logout

UCSF School of Medicine

Search Add New Course Save All as Draft Publish All

Course Title	Course ID	Course Year	Course Level	Publish Status
Foundations of Patient Care Year 1	FPC1_12-13	2012-2013	Level1	<input checked="" type="checkbox"/> Published

82 sessions found for this course. Alpha ascending Expand All

- Adult Physical Exam Review  Published
- Adult Preceptorship #1  Published
- Adult Preceptorship #2  Published

Save Draft Publish

Session Title:

Session Type:   Independent Learning Add Groups

Offerings:
 

- Tue Oct 30 2012 13:00 PM - 17:00 PM
- Thu Nov 01 2012 13:00 PM - 17:00 PM
- Wed Nov 14 2012 08:00 AM - 12:00 PM

Go to Calendar (3) Create Offerings by Group

Groups

Curriculum Type:  Core  Supplemental

Special Requirements:
 

- Special Attire Required
- Special Equipment Required

Description: Edit

Topics:  Edit

MeSH Terms:  Edit

Learning Materials (0) Add


Objectives (4) Add Objective

- Identify elements of the medical history as they are used in practice, and ways in which the history is individualized to a specific patient Add MeSH (0)
- Continue to develop medical history-taking skills, with emphasis on taking a complete or focused medical history Add MeSH (0)
- Continue to develop physical examination skills, with emphasis on the cardiovascular exam, as well as trying to establish a routine or "flow" for performing the basic physical exam Add MeSH (0)
- Using the Preceptorship Tracker in Portfolio, accurately document and reflect upon patient encounters Add MeSH (0)

- Adult Preceptorship #3  Published
- Adult Preceptorship #4  Published

[\(back to top\)](#)

# Courses

 Home Programs Instructors Learner Groups Courses and Sessions
Sascha Cohen Last Login: September 5, 2012 9:47 PDT [Logout](#)

UCSF School of Medicine

Search 
Add New Course
Save All as Draft
Publish All

Course Title	Course ID	Course Year	Course Level	Publish Status
Foundations of Patient Care Year 1	FPC1_12-13	2012-2013	Level1	<input checked="" type="checkbox"/> Published

Course Name:  Show Course Summary

Course ID:  IliosBY9C

Course Year: 2012-2013

Course Level:

Program Title	Cohort	Current Level
Doctor of Medicine	Class of 2016	1

Associated Student Groups:

Start Date:  📅

End Date:  📅

Competencies

Topics Search

Directors:  Search

MeSH Terms Search

Learning Materials (0) Search / Add

Objectives (6)

<input checked="" type="checkbox"/> Patient Care	<input type="text" value="Add MeSH (0)"/>
<input checked="" type="checkbox"/> Interpersonal and Communication Skills	<input type="text" value="Add MeSH (0)"/>
<input checked="" type="checkbox"/> Practice-Based Learning and Improvement	<input type="text" value="Add MeSH (0)"/>
<input checked="" type="checkbox"/> Professionalism	<input type="text" value="Add MeSH (0)"/>
<input checked="" type="checkbox"/> Medical Knowledge	<input type="text" value="Add MeSH (0)"/>
<input checked="" type="checkbox"/> Systems-Based Practice	<input type="text" value="Add MeSH (0)"/>

Save Draft
Publish Course
Reset Form

[\(back to top\)](#)



# Programs

UCSF School of Medicine

## Program Management

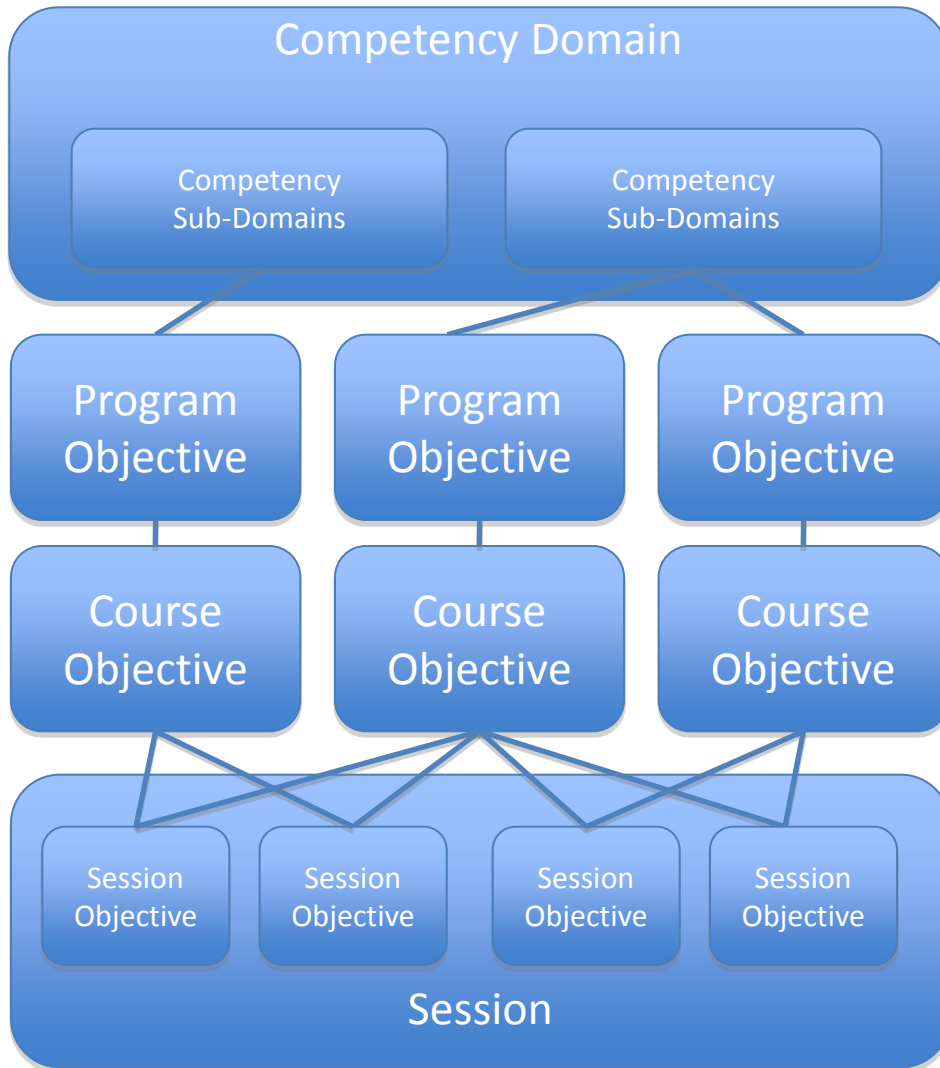
Search Add New Program

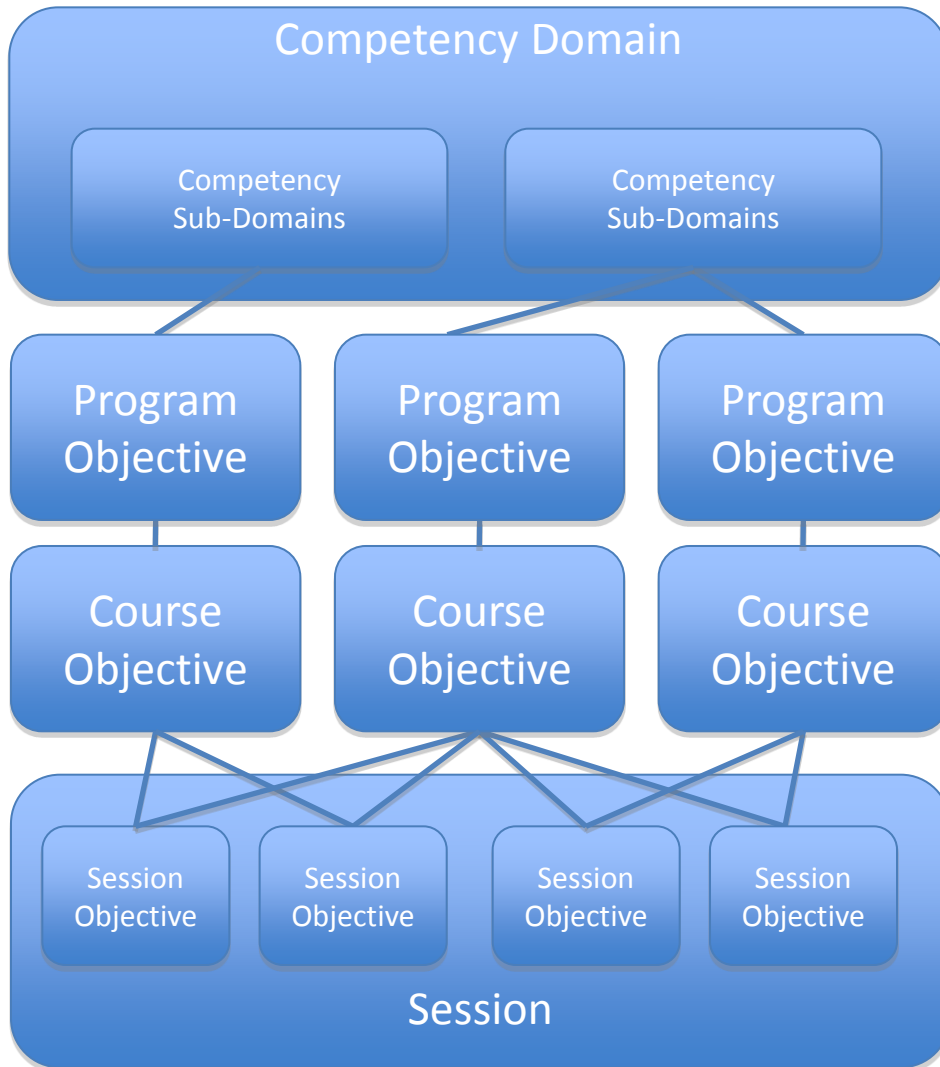
Save All as Draft Publish All

Program Title (Full)	Program Title (Short)	Duration (In Years)	Publish Status
<b>Doctor of Medicine</b>	<b>MD</b>	<b>4</b>	<input checked="" type="checkbox"/> <b>Published</b>
<a href="#">Expand All</a>			
<input checked="" type="checkbox"/> Academic Year: 2006-2007			<input checked="" type="checkbox"/> Published <input type="checkbox"/>
<input checked="" type="checkbox"/> Academic Year: 2007-2008			<input checked="" type="checkbox"/> Published <input type="checkbox"/>
<input checked="" type="checkbox"/> Academic Year: 2008-2009			<input checked="" type="checkbox"/> Published <input type="checkbox"/>
<input checked="" type="checkbox"/> Academic Year: 2009-2010			<input checked="" type="checkbox"/> Published <input type="checkbox"/>
<input checked="" type="checkbox"/> Academic Year: 2010-2011			<input checked="" type="checkbox"/> Published <input type="checkbox"/>
<a href="#">Save Draft</a> <a href="#">Publish</a>			
Academic Year	2010-2011		
▶ Competencies	Interpersonal & Communication skills; Medical Knowledge; Patient Care; Prac...		<a href="#">Edit</a>
▶ Objectives (36)			<a href="#">Add Objective</a>
▼ Topics	Anatomy; Anesthesiology; Behavioral Science; Biochemistry; Cell Biology; Clinical and Translational Research; Clinical Skills; Complementary/Alternative Healthcare; Problem Solving; Cultural Competence; Embryology; Emergency Medicine; Epidemiology; Ethics, Medical; Genetics; Geriatrics; Histology; Human Sexuality/Sexual Functioning; Humanities, Medical; Immunology; Health Informatics; Global Health Issues; Microbiology; Neurology; Nutrition; Obstetrics and Gynecology; Occupational Health/Medicine; Pathology; Pediatrics; Pharmacology; Physiology; Prevention/Health Maintenance; Professional Development; Psychiatry; Public Health; Radiology; Societal Problems; Surgery		<a href="#">Edit</a>
▶ Program Directors			<a href="#">Edit</a>
▶ Stewarding Departments or School	AIDS Research Institute; Anatomy, Anesthesia and Perioperative Care; Anthro...		<a href="#">Edit</a>
<input checked="" type="checkbox"/> Academic Year: 2011-2012			<input checked="" type="checkbox"/> Published <input type="checkbox"/>
<input checked="" type="checkbox"/> Academic Year: 2012-2013			<input checked="" type="checkbox"/> Published <input type="checkbox"/>

[\(back to top\)](#)







Programs are made up of complex interwoven objectives that overlap at several levels

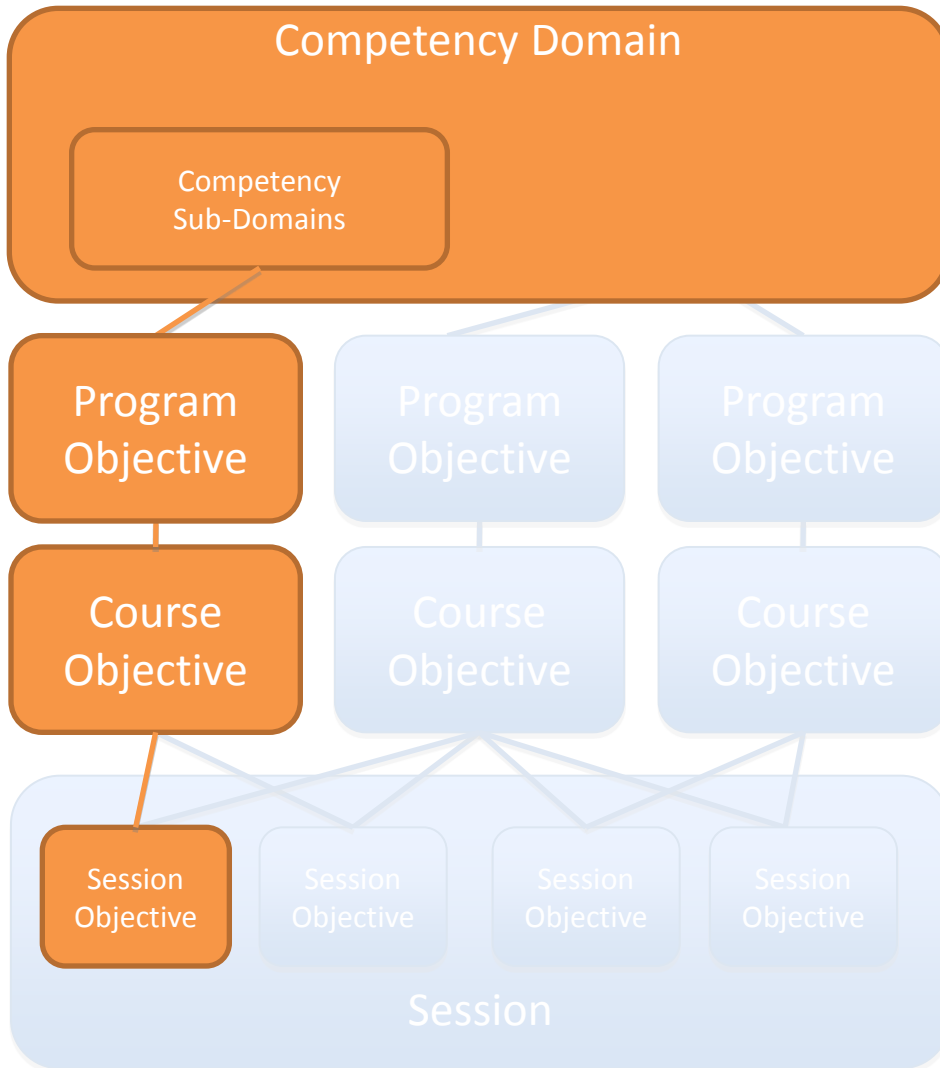




Programs are made up of complex interwoven objectives that overlap at several levels

Ilios can help you isolate, and track individual threads through each layer

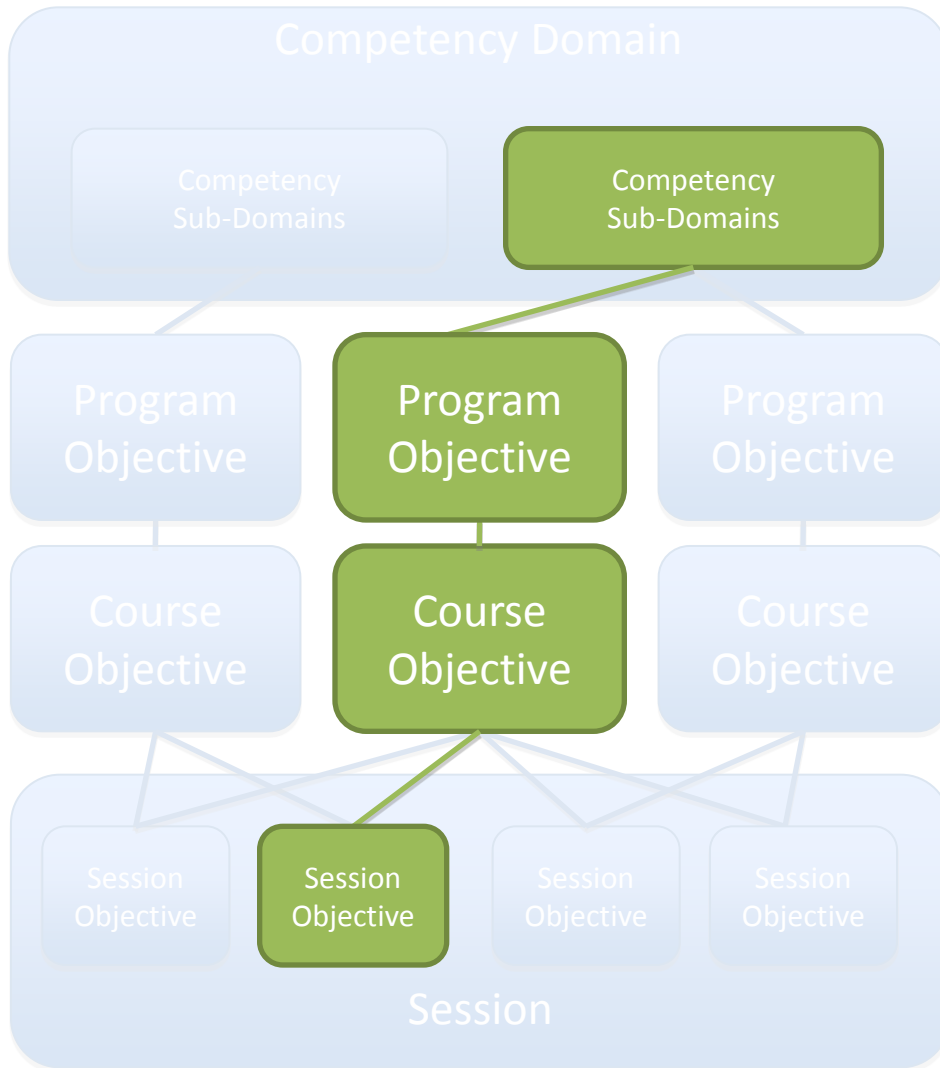




Programs are made up of complex interwoven objectives that overlap at several levels

Ilios can help you isolate, and track individual threads through each layer

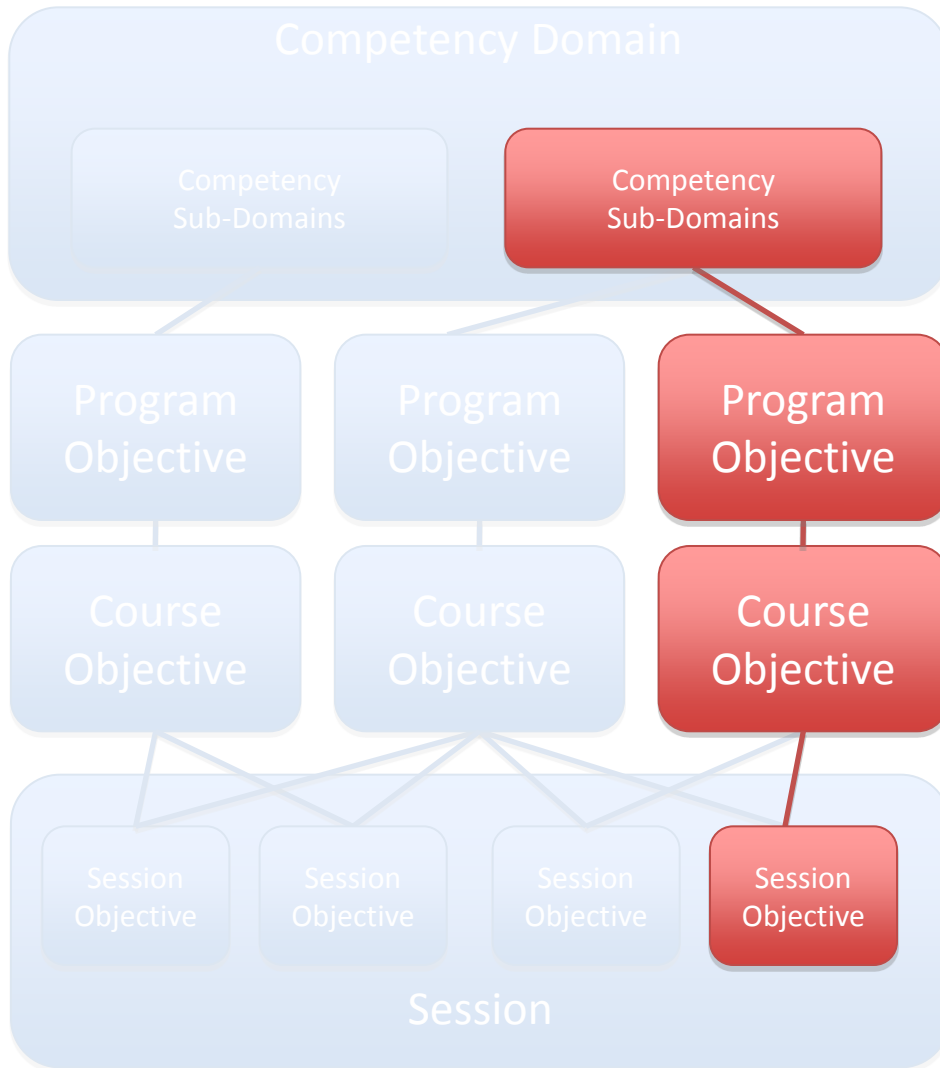




Programs are made up of complex interwoven objectives that overlap at several levels

Ilios can help you isolate, and track individual threads through each layer

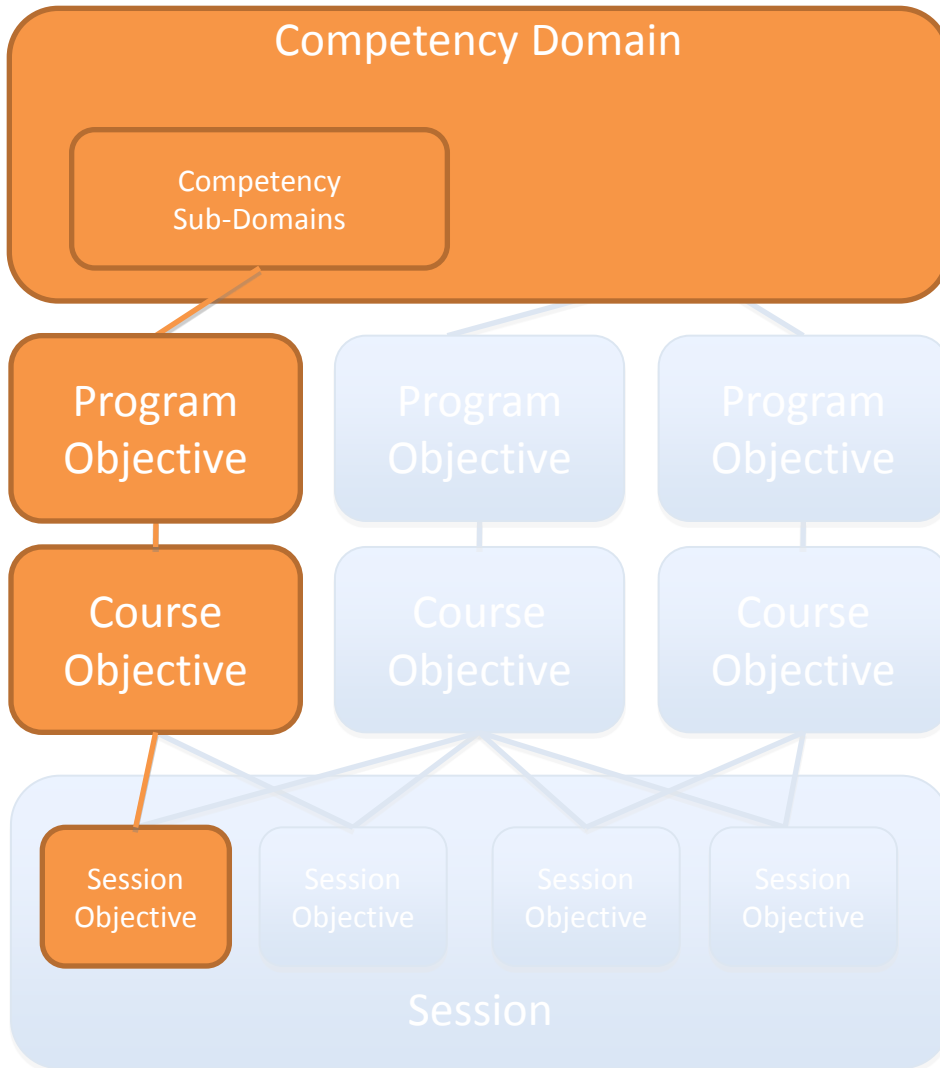




Programs are made up of complex interwoven objectives that overlap at several levels

Ilios can help you isolate, and track individual threads through each layer





Let's track a single thread from the **Interpersonal and Communication Skills** From Competency Domain to Session Objective.

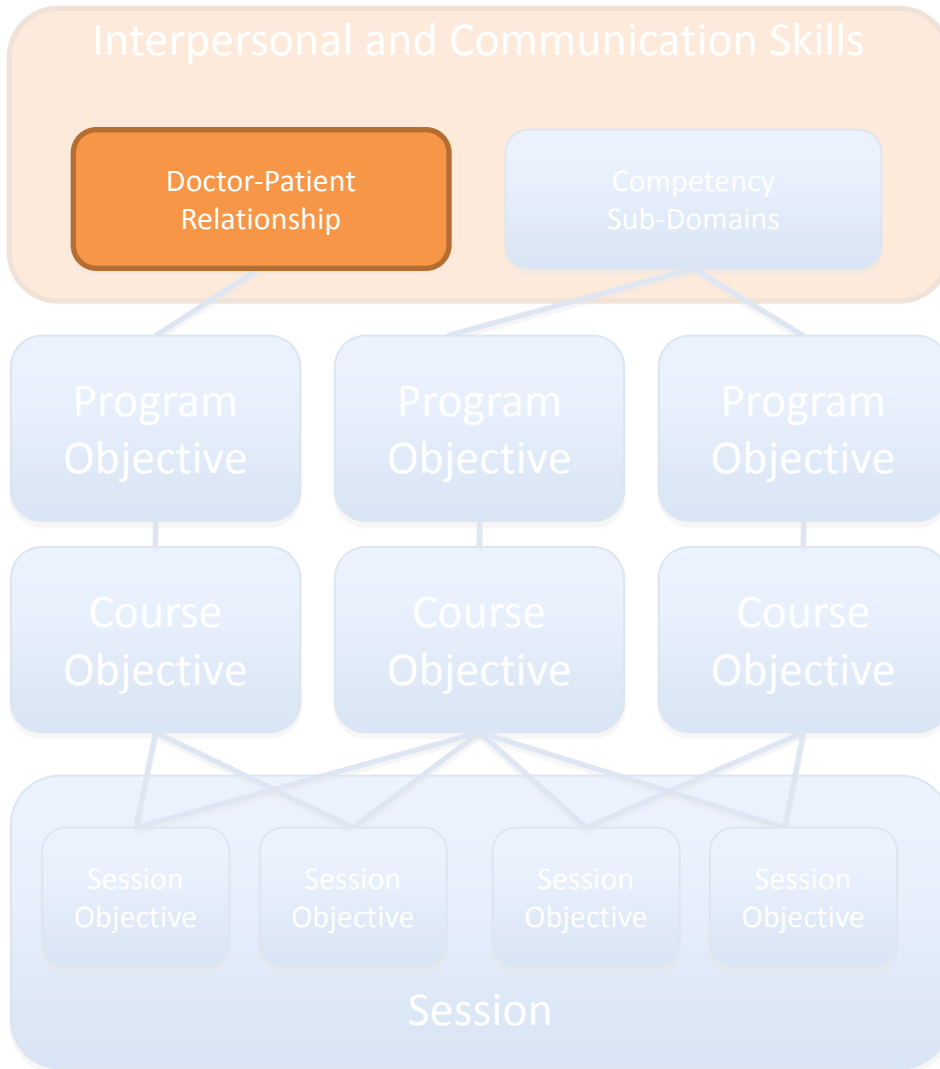




**Competency Domain:**  
Interpersonal and  
Communication Skills

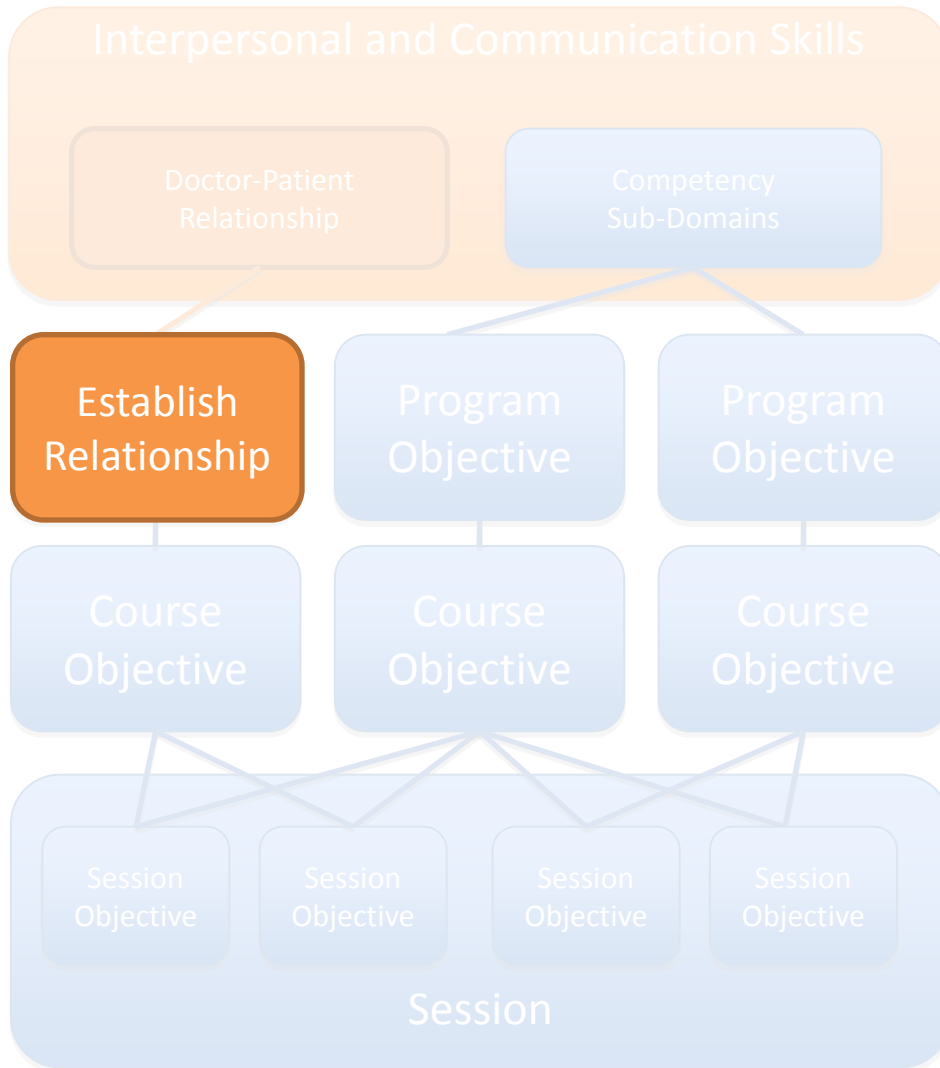






**Competency  
Sub-Domain:  
Doctor-Patient  
Relationship**





**Program Objective:**  
Establish a collaborative  
and constructive  
relationship with  
patients and their  
families





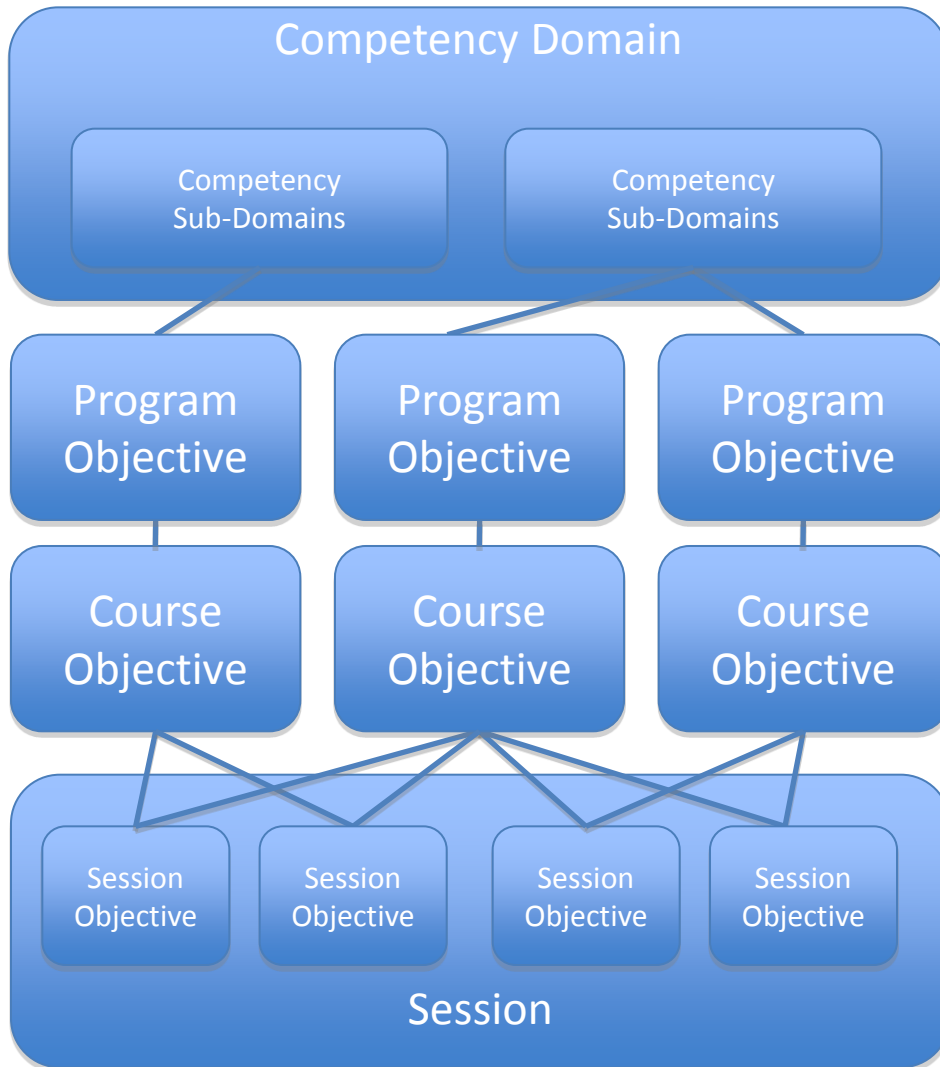
**Course Objective:**  
Establish rapport and demonstrate caring and respectful behaviors when interviewing children, adolescents, adults and elderly patients.



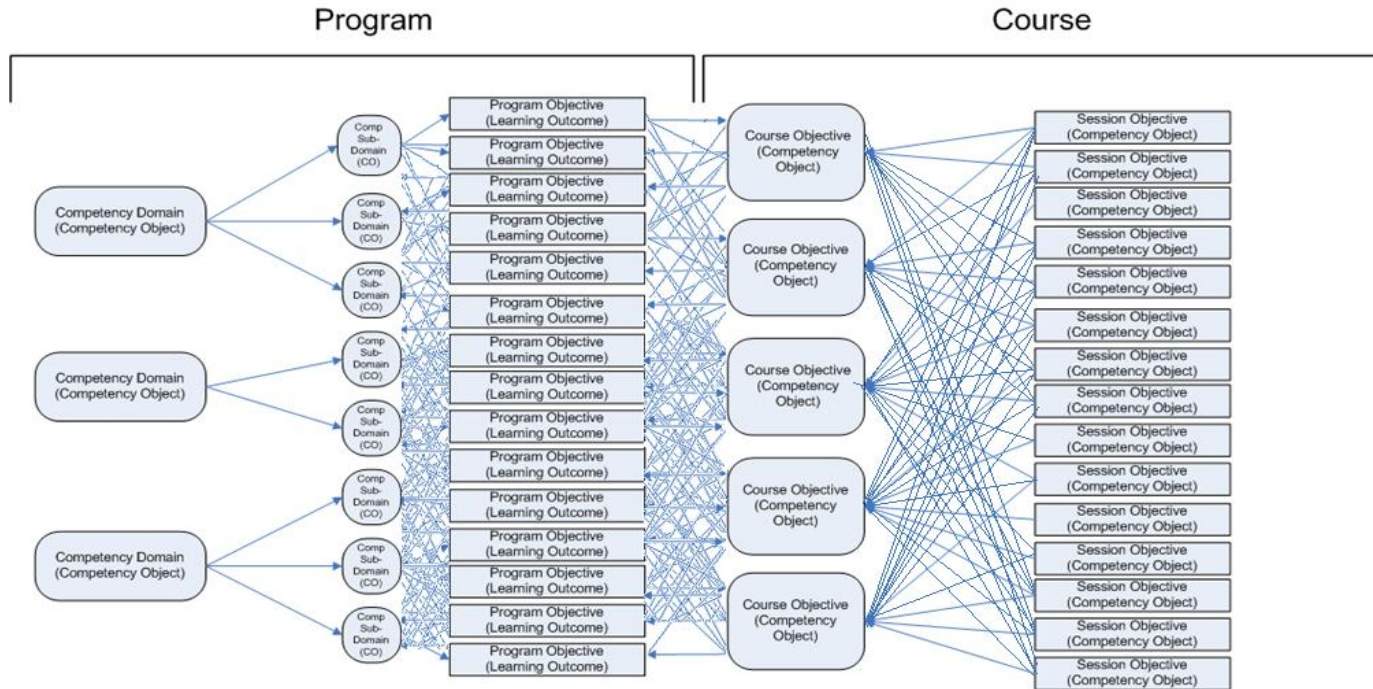


**Session Objective:**  
Demonstrate how to ask patients about their illness, their health care, and their relationships with physicians or other health care providers

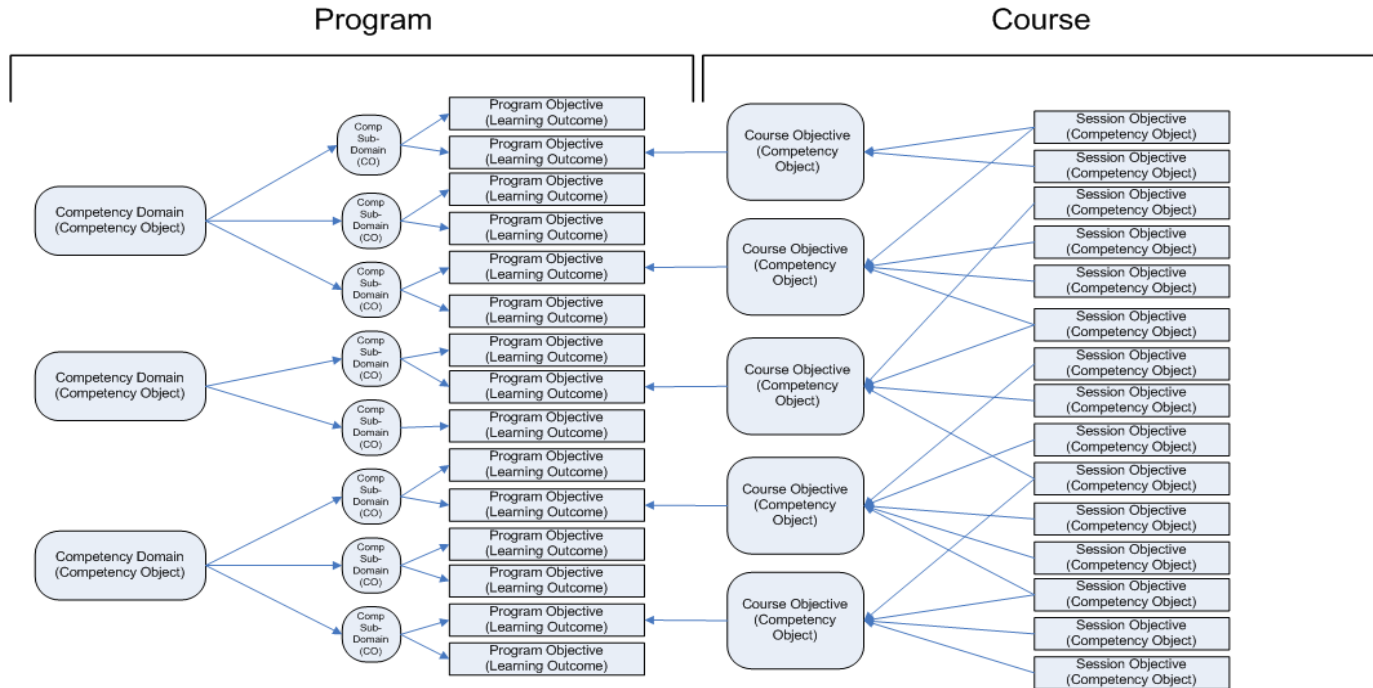




# Noise vs. Data



# Noise vs. Data



# Sample Report

Search of Objectives, Topics, & MESH Terms In Ilios Courses related to Healthcare Disparaties, Jan 2013

---

**Foundations of Patient Care Year 1**

Level: 1

---

**Session:** Clinical Skills Midterm Examination

Session Type: Exam - Institutionally Developed, Clinical Perform

**Search Type**

**Search Term**

Obj

socioeconomic

**Objectives**

Course Obj: Professionalism

Session Obj: Demonstrate sensitivity and responsiveness to patients' culture, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities, and other aspects of diversity

---

**Session:** FPC Year 1 Final Examination: Mini-OSCE

Session Type: Exam - Institutionally Developed, Clinical Perform

**Search Type**

**Search Term**

Obj

socioeconomic

**Objectives**

Course Obj: Professionalism

Session Obj: Demonstrate sensitivity and responsiveness to patients' culture, race/ethnicity, age, socioeconomic status, gender, sexual orientation, spirituality, disabilities, and other aspects of diversity





# What can we achieve?

- Evidence-based quality improvement
- Identification of gaps and redundancies
- Shared vocabulary in the health professions community
- Flexibility to adapt to new educational models



# Questions

