



# The SOAP Approach to Conquering the Competencies Challenges

## An AAMC Group on Educational Affairs CACHE Initiative Competencies Across the Continuum of Health Education

<http://www.aamc.org/members/gea/>

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## A GEA-CACHE Train-the-Trainer Initiative

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## PREFACE TO COMPANION WORKBOOK

Thank you for choosing the *AAMC-Group on Educational Affairs* (GEA) sponsored program “Conquering the Competencies Challenges – the SOAP Approach” CD-ROM. Developed as part of a larger project, entitled *CACHE: Competencies Across the Continuum of Health Education*, the SOAP Teaching Modules (originally presented on a CD-ROM<sup>1</sup>) are designed to enhance faculty and residency program directors’ abilities to effectively and efficiently address and assess the *Accreditation Council on Graduate Medical Education’s* (ACGME) six core competencies.

### SOAP Modules

To provide residency educators and faculty with a common language and approach to the design and assessment of competency-based medical education, we have adapted the SOAP acronym to frame the design/assessment process:

- S Study current teaching/assessment measures relative to *ACGME* competencies
- Objectify assessment process by adopting/adapting available measures or creating new measures
- Audit: Tune up system and revise, as needed, based on evidence
- Plan: Infrastructure and resource issues associated with competency-based education

Two ready-to-use teaching modules designed to enhance faculty’s understanding and ability to systematically design and evaluate residency education are provided on the CD. The CD contains a complete set of instructor’s resources to use (and/or adapt) for each module, including Power Point slides with associated speaker notes, visuals and video clips, participant handouts and references. Each module was designed to utilize the modified SOAP format to teach about designing competency-based education. However, each module is targeted to different audiences.

- Module 1 is intended for a general faculty audience and can be presented in approximately 40 minutes with time for questions/discussion.
- Module 2 is intended for individuals who have primary responsibility for residency education, including residency program directors, curriculum/assessment committee members, and coordinators. It is organized to run approximately two hours using a combination of lecture and interactive exercises built to equip participants with an individualized teaching and assessment blueprint and associated action steps.

### Companion Workbook for Module 2

As part of a SOAP dissemination workshop for the Western Group on Educational Affairs lead by Stewart P. Mennin, PhD, Randy Steadman, MD, and Elizabeth H. Morrison, MD, MSED, the authors saw the need for a detailed workbook to accompany the CD. Deana M. Richer, MA, Associate Director for Teacher and Educational Development at the University of New Mexico School of Medicine, created this Companion Workbook to accompany the CD. It contains the content from Module 2 in a convenient and accessible narrative format for individual users.

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<sup>1</sup> Available from the Association for Surgical Educator’s Clearinghouse <http://www.surgicaleducation.com/educlear/>

## PREFACE TO COMPANION WORKBOOK

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## **INTRODUCTION**

### **Goal**

To provide you with an organizational structure, strategies/tools, resources, and practice in planning for teaching and assessing the ACGME core competencies as part of meeting your institution's accreditation requirements.

### **Objectives**

After this session, you will be able to:

- Describe the development of, and rationale for, the *ACGME Outcomes Project*
- Utilize the modified SOAP approach to respond to the competencies challenge
- Apply a blueprinting process to documenting your teaching and assessment plan specific to the ACGME competencies

## **What Are the ACGME Competencies?**

- Patient Care
- Medical Knowledge
- Practice-Based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems-Based Practice

## **What is the ACGME Outcomes Project?**

### **From ACGME, Outcome Project:**

The ability to demonstrate educational outcomes as the achievement of competency-based learning objectives provides evidence of preparing competent physicians who can meet the health care needs of the public. Educational assessment is, therefore, a key component of the Outcome Project and is intended to:

1. Assess residents' attainment of competency-based objectives
2. Facilitate continuous improvement of the educational experience
3. Facilitate continuous improvement of resident performance
4. Facilitate continuous improvement of residency program performance

### **Required by June of 2006:**

Sharpen the focus and definition of the competencies and assessment tools

#### **Programs:**

- Provide evidence of learning in all six competencies
- Use progressively more dependable measurement tools
- Provide evidence of initial efforts to use evaluation data in assessing resident learning in all competencies

#### **RRCs:**

- Review learning and assessment of all six competencies in programs under consideration
- Review assessment methods that emerge from field
- Provide citations with consequences
- Revise requirements to reflect new or changed expectations

## **THE MODIFIED SOAP APPROACH TO CONQUERING THE COMPETENCIES CHALLENGE**

The RRC is coming—SOAP it now!



### **What Steps Are Involved in Studying Your Current Program?**

- Identify and publicly adapt/adopt your RRC’s articulation of specific competencies. An example of a competency and associated RRC requirements is provided below:

<b>ACGME Competency</b>	<b>RRC Requirements</b>
<b>Patient Care</b>	<b>1. Data Gathering: History &amp; Physical Exam</b> <b>2. Differential Diagnosis: Prioritized</b> <b>3. Clinical Judgment: Combinatorial EBM Decisions</b> <b>4. Management Plan: From CC to Discharge</b> <b>5. Cost Effective Care: Analysis of Risks, Benefits, and Patient’s Goals</b>

- Analyze your current teaching methods (e.g., morning rounds, journal club, a.m. report, etc.) and assessment methods (e.g., faculty rating form, in-service exam, OSCE, etc.) specific to each competency.
- Identify gaps and:
  - Adapt (incorporate within existing method)
  - Adopt (new method from another source)
  - Author (new method)



On the following worksheet, indicate with a check mark those competencies that are currently adequately addressed in your curriculum and assessment system. Use a question mark to identify areas that require further study.

Competencies (see Appendix pp. 28-29 for detailed definitions)	Instruction	Assessment
Patient Care		
Medical Knowledge		
Interpersonal and Communication Skills		
Practice Based Learning and Improvement		
Professionalism		
Systems Based Practice		

### What “Gaps” Need to be Filled to Ensure Full Compliance?

Two additional blueprints are needed—the first to more specifically indicate how/where each competency is being taught/learned and the second to indicate how outcomes are being assessed.

#### Teaching Blueprint

A teaching blueprint maps out where/how in the curriculum the competencies (and/or their specialty-specific subcomponents) are being taught/learned. An example of a partial teaching blueprint that includes RRC subcomponents is provided below.

INTERNAL MEDICINE RESIDENCY COMPETENCIES TEACHING BLUEPRINT					
Competencies & Subcomponents	Teaching Methods				
	Attending Rounds	A.M. Report	Autopsy Conf	Journal Club	On-Line Modules
<b>Patient Care</b>					
1. Data Gathering: History & Physical Exam	X	X		X	
2. Differential Diagnosis: Prioritized	X	X	?		X
3. Clinical Judgment: Combinatorial EBM Decisions	X			X	
4. Management Plan: From CC to Discharge	X	X			
5. Cost Effective Care: Analysis of Risks, Benefits & Patient’s Goals	?	?	X	?	?
<b>Medical Knowledge</b>					
1. Appropriate breadth and depth of knowledge within specialty	X	?	?		X
2. Ability to explain the underlying pathophysiology associated with patient assessment and management			X	X	

Detailed definitions of the ACGME competencies are provided in the Appendix (pp. 31-33). To obtain information needed to complete the RRC competencies relative to ACGME on the worksheet on the following two pages, you may go to the ACGME Website ([www.acgme.org](http://www.acgme.org)) and pull down your specialty-specific requirements relevant to the competencies. There may be more components under each category than you choose to include in your blueprint. These can be selected by the program director and/or vetted with your faculty to obtain buy-in.



### Instructions for Completing the Teaching Blueprint on Next Two Pages

- List all methods currently used for teaching residents
- List specific RRC subcomponents under each ACGME competency
- For each RRC subcomponent, put a checkmark under the methods that are currently employed to teach that competency
- Identify gaps in instruction for each RRC competency subcomponent
- Consider means of closing the gap through adaptation, adoption, and/or authoring

(See instructions on previous page.)

**COMPETENCY BLUEPRINT WORKSHEET – TEACHING – Page 1**

RRC Competencies Relative to ACGME	Teaching Methods							
<b>Patient Care</b>								
1.								
2.								
3.								
4.								
<b>Medical Knowledge</b>								
1.								
2.								
3.								
4.								
<b>Practice Based Learning and Improvement</b>								
1.								
2.								
3.								
4.								

**COMPETENCY BLUEPRINT WORKSHEET – TEACHING – Page 2**

RRC Competencies Relative to ACGME	Teaching Methods							
<b>Interpersonal and Communication Skills</b>								
1.								
2.								
3.								
4.								
<b>Professionalism</b>								
1.								
2.								
3.								
4.								
<b>Systems-Based Practice</b>								
1.								
2.								
3.								
4.								

**Assessment Blueprint**

An assessment blueprint maps out when/how outcomes associated with the competencies (and/or their specialty-specific subcomponents) are being assessed. An example of a partial teaching blueprint that includes RRC subcomponents is provided below.

<b>INTERNAL MEDICINE RESIDENCY COMPETENCIES ASSESSMENT BLUEPRINT</b>					
<b>Competencies &amp; Subcomponents</b>	<b>Assessment Methods</b>				
	Faculty Rating Form	Oral Exam	In-Service Exam	Biannual Review with RPD	OSCE
<b>Patient Care</b>					
1. Data Gathering: History & Physical Exam	X			X	X
2. Differential Diagnosis: Prioritized		X			X
3. Clinical Judgment: Combinatorial EBM Decisions			X		
4. Management Plan: From CC to Discharge		X	X		
5. Cost Effective Care: Analysis of Risks, Benefits & Patient's Goals		X	X		X
<b>Medical Knowledge</b>					
1. Appropriate breadth and depth of knowledge within specialty	X	X	X		
2. Ability to explain the underlying pathophysiology associated with patient assessment and management	X		X	X	



Use the worksheet on the following two pages to create a blueprint of how the AGCME competencies/subcomponents are currently assessed at your institution.

**Instructions for Completing the Assessment Blueprint on the Next Two Pages**

- List all methods currently used for assessing resident outcomes
- List specific RRC subcomponents under each ACGME competency (detailed definitions of competencies are found in Appendix on pp. 31-33)
- For each RRC subcomponent, put a checkmark under the methods that are currently employed to assess that competency
- Identify gaps in assessment for each RRC competency subcomponent
- Consider means of closing the gap through adaptation, adoption, and/or authoring

(See instructions on previous page.)

COMPETENCY BLUEPRINT WORKSHEET – ASSESSMENT – Page 1								
RRC Competencies Relative to ACGME	Assessment Methods							
<b>Patient Care</b>								
1.								
2.								
3.								
4.								
<b>Medical Knowledge</b>								
1.								
2.								
3.								
4.								
<b>Practice Based Learning and Improvement</b>								
1.								
2.								
3.								
4.								

**COMPETENCY BLUEPRINT WORKSHEET – ASSESSMENT – Page 2**

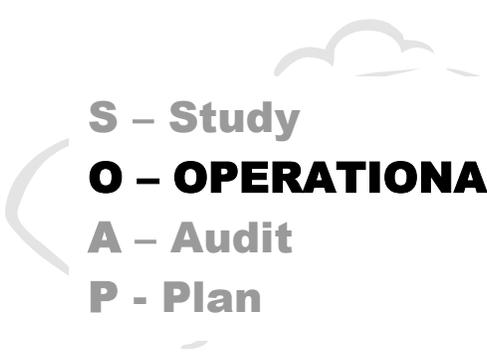
RRC Competencies Relative to ACGME	Assessment Methods							
<b>Interpersonal and Communication Skills</b>								
1.								
2.								
3.								
4.								
<b>Professionalism</b>								
1.								
2.								
3.								
4.								
<b>Systems-Based Practice</b>								
1.								
2.								
3.								
4.								

## **What Resources Are Available to Help Fill the Gaps?**

- Internal Resources
  - Residency Program Director Colleagues
  - GME Office
  - Educational Consultant
- External Resources
  - Your RRC and the ACGME Website ([www.acgme.org](http://www.acgme.org))
  - Specialty and Medical Education (AAMC) Meetings
  - Medline Search
  - GEA/CACHE Website (<http://www.aamc.org/members/gea>)
  - Family Medicine Curriculum Resource Project of the Society of Teachers of Family Medicine/Health Resources and Services Administration (<http://www.stfm.org/curricular/index.htm>) – includes model curricula based on the ACGME competencies

## **“Study” Summary**

1. REVIEW – Your specialty’s RRC guidelines by specific competency
2. CROSS CHECK – Your objectives/assessments = RRC competencies
3. IDENTIFY – Overlaps/gaps using teaching and assessment blueprints
4. SEARCH – For existing resources
5. DETERMINE – Whether to fill the gaps by adapting, adopting, and/or authoring



**S – Study**

**O – OPERATIONALIZE**

**A – Audit**

**P - Plan**

## **How Can Plan to Fill the Gaps Be Operationalized?**

Once the current curriculum has been studied, gaps identified, and resources explored, the plan to fill the gaps needs to be operationalized so that it can be implemented. Three components to consider in operationalizing your system are:

- Data Collection Instruments (Assessment)
  - Adapt instruments currently being used?
  - Adopt someone else’s instruments?
  - Author new instruments targeted to gaps in blueprint?
- Raters
  - How to rate competencies?
  - How to train raters to use instruments and avoid biases (e.g., horns/halos)?
- Design/System
  - How to standardize (e.g., time, form, etc.)?
  - How to manage the process from distribution and data analysis to interpretation and follow-up?
  - How to document?

### **Operationalizing Assessment Instruments**

On the ACMGE website, assessment is defined as the “process of collection, synthesizing, and interpreting information to aid decision-making” (Airasian, 1997). The results of an assessment should allow sound inferences about what learners know, believe, and can do in defined contexts (McMillan, 2001).

## GEA-CACHE: Conquering the Competencies Challenge Modified SOAP – Operationalize

### Strategies for **adapting** an existing assessment instrument:

- Revise items to address gap areas
  - Circulate draft instruments to stakeholders (including faculty, residents, senior medical students, and staff) for their comments and additions.
- Add new items
  - See ACGME Assessment Methods Toolbox (<http://www.acgme.org/outcome/assess/toolbox.asp>)
- Formalize informal rater judgments (such as often occur in Journal Club, autopsy or grand rounds, M&M presentations)

### Resources for **adopting** existing assessment tools:

- Resident’s Competency Card (<http://www.abim.org/pubs/Residents%20Competency.pdf>)
- The University of California, Irvine College of Medicine website for resident teaching ([www.residentteachers.com](http://www.residentteachers.com)) – includes an objective structured teaching examination (OSTE) for resident physicians
- The University of New Mexico Teacher & Educational Development website for resident teaching (<http://hsc.unm.edu/som/ted/ResidentTeachers/>) – see “Evaluation” under “Teaching Tools”

### Factors to consider and steps in the process of **authoring** an assessment instrument:

What factors should be considered in each of the following areas to construct a tool that addresses the ACGME competencies?

- Educational Measurement
- Practicality/Feasibility in Your Program

Although there is a systematic process for authoring assessment tools, ideas may come from your daily observations and interactions and from many sources. An example of the process is provided below.

1. Assessment tools are studied.
2. Gaps are identified – e.g., limited assessments in the areas of professionalism, practice-based learning and improvement, systems-based practice
3. An opportunity is identified – e.g., noon conference can add 10 minutes of assessment
4. A tool is authored – e.g., a conversation overhead between two learners creates an “ah-ha!” The discussion is recreated and an assessment tool developed based on the insight gained.

**GEA-CACHE: Conquering the Competencies Challenge Modified SOAP – Operationalize**



On the following worksheet, list assessment gaps identified in the “study” of your current curriculum (pp. 12-13). Explore options and indicate whether you will fill that gap through adapting, adopting, and/or authoring. Describe what or how you will do so.

<b>Assessment Gap</b>	<b>Adapt, Adopt, Author?</b>	<b>What/How?</b>

## **What Principles of Assessment Should Guide the Process?**

The two key measurement questions are:

1. What is to be measured?
  - Match to specific competency objectives
  - Emphasize important topics more (e.g., testing time, weight, emphasis) than less important topics
  - Ensure adequate sample that is representative of topic/domain
2. How is it to be measured? Consider whether instrument is:
  - Credible
  - Comprehensive
  - Valid (content, concurrent, predictive, construct)
  - Reliable
  - Feasible/practical in your program
  - Educational

## **Validity**

Validity is the extent to which the instrument measures what it was designed to measure. The focus is on appropriateness of interpretation of results for intended use. The inferences drawn from the use of an instrument are valid only for the intended audience/purpose.



Three ways to judge validity (Gronlund, 2003):

1. Face/content-related evidence
  - Face-related: looks like a duck, sounds like a duck, must be a duck
  - Content-related: focuses on adequacy of sampling and correspondence of test items to domain of tasks to be measured
2. Criterion-related evidence
  - Relationship/comparison between this and other phenomena purported to measure the same thing
    - Predictive (future performance) – e.g., MCAT and medical school grades
    - Concurrent (performance at same time) – e.g., OSCE + self exam + faculty rating on medical clerkship

3. Construct-related evidence

- Assumed theoretical relationships between established phenomena and current behavior: psychological construct or characteristic—e.g., specialty choice
  - People oriented = family medicine not pathology
  - Analytical = medicine
  - High psychomotor skills = surgical dexterity
- Level of surgery residents performance consistent with scores derived from an OSATS skills test—e.g.,
  - Lax construct validity if junior residents score higher than senior residents

Reliability

Reliability is a measure of the consistency (reproducibility) of the scores obtained. Methods of estimating reliability of test scores include (Gronlund, 2003):



1. Inter-rater reliability – obtaining and comparing scores of two or more judges who score performance independently
2. Test-retest reliability – administering the same or equivalent tests in a defined time interval
3. Internal consistency – administering test once and computing consistency of responses within the test
4. Item analysis – calculating and analyzing test results to determine item difficulty, discriminatory power, and effectiveness of each alternative

**Operationalizing the System (Educational Infrastructure)**

**Why is the assessment being conducted?**

- Formative (provide feedback for development without official “grade”)?
- Summative (satisfy official institutional/societal reporting purposes in addition to feedback to learner)?

**Who will participate?**

- Who will be assessed?
- Who will conduct the assessment?
- Who will rate/score responses?
- Who will oversee the system—collecting, analyzing, reporting?
- Who will receive the data?

**What is being evaluated?**

- Knowledge, attitude, skills?
- Based on which objectives linked to ACGME competencies and RRC subcomponents?

**When will the assessment be conducted?**

- At what time on what date?
- How frequently?

**Where will the assessment be conducted?**

**How will the data be processed?**

- How will it be gathered/tracked?
- How will it be “rated” (standard setting)?
- How will it be analyzed/summarized?
- How will it be reported?
- How will it be stored/documentated?

**So What?**

- What do the data mean to the person being assessed and to the institution?
- What are the consequences of failure?



## What Should Be Audited and How?

The purpose of auditing is to ensure continuous quality improvement of:

- Methods (teaching and assessment)
- The system (educational infrastructure)

### Auditing Methods - Assessment Tools

**NOTE: This section is provided to highlight activities involved in determining reliability and validity, not to provide detailed information/training on how to conduct the statistical techniques described. For assistance with educational measurement/statistics, you may wish to consult with the SDRME representative in your region ([www.sdrme.org](http://www.sdrme.org)) and/or with an individual in your institution with expertise in that area.**

The following example illustrates key concepts and elements in the process of auditing an assessment tool.

#### Background:

- Assessment Tool: Department of Surgery Resident Evaluation Form (provided on next page)
  - Completed by faculty at end of rotation
  - Developed prior to ACGME competencies
- Question: Is it reliable and valid?
- Data Collection:
  - 6 months
  - N = 74 faculty raters
  - Rating 36 surgical residents

The Sample Assessment Instrument:

<b>DEPARTMENT OF SURGERY RESIDENT EVALUATION FORM<sup>1</sup></b>	<b>Above Average</b>	<b>Average</b>	<b>Needs Counseling</b>
<b>Medical Knowledge</b>			
Applies pathophysiology readily			
Organized fund of knowledge			
Able to assess medical information readily and use clinically			
Applies medical knowledge to clinical problems			
Presentations clear and insightful			
Demonstrates continuous professional growth			
<b>Surgical/Clinical Skills</b>			
Prepares for cases			
Proper tissue handling			
Understands surgical anatomy			
Can focus and understand perioperative principles			
Aware of surgical controversies and alternatives			
<b>Patient Relations</b>			
Demonstrates ability to explain to patient what is expected of the patient undergoing a surgical procedure			
Can accurately inform patients of postoperative care plans			
Treats patients with respect and empathy			
Demonstrates skills for managing outpatients			
<b>Interpersonal Skills</b>			
Interacts with peers and other healthcare professionals without excessive conflict			
Internally motivated and enthusiastic			
Demonstrates the ability to be a member of a healthcare team of professionals			
Able to communicate effectively with others			

Example Test of Reliability

An analysis was performed using Cronbach’s Coefficient Alpha, which takes all of the items under each major header in the rating form (i.e., medical knowledge) and correlates them against each other to determine internal consistency.

- Cronbach’s Coefficient Alpha measures correlation to determine internal consistency of the assessment tool.
- Range is usually 0 – 1.00 (negative number is not good)
- Acceptable reliability consists of:
  - Minimum of .70

<sup>1</sup>Brassel, K.J., Simpson, D.E., & Weigelt, J.A. (2004). Meeting the Accreditation Council for Graduate Medical Education Competencies Using Established Residency Training Program Assessment Tools. *Am J Surg* 188(1): 9-12.

The results of the analysis of the original surgery form, indicated below, yielded high reliability coefficients within each category.

**Resident Evaluation Form (Original)**

<b>Categories/Variables</b>	<b>Reliability</b>
Medical Knowledge	.92
Surgical/Clinical Skills	.89
Patient Relationships	.92
Interpersonal Skills	.94
Leadership/Administrative	.92

Example Test of Validity

Once reliability has been established (the instrument is consistently measuring some aspect of performance), the question remains:

**Are you measuring what you intended to measure?**

One statistical method for determining the validity of an instrument is factor analysis. Items most related to each other can be grouped by using the principal components method of factor analysis and the varimax rotation. For the Department of Surgery Resident Evaluation Form, factor analysis revealed the following:

- Medical Knowledge items did cluster as medical knowledge.
- Patient Relationships items did cluster as patient relationships.
- Categories of Interpersonal Skills, Leadership Skills, and Surgical Skills were not strongly supported:
  - Items from Interpersonal Skills and some from Leadership Skills were more strongly associated in a single factor, resulting in a new category labeled “Interpersonal Communication Skills.”
  - Other items in Leadership Skills and items in Surgical Skills were more strongly clustered in a new factor labeled “Professionalism.”

To assess the reliability of the new factors, Chronbach’s Alpha was repeated for each new factor and its associated items.

Identified Gaps

An audit of the Department of Surgery Resident Evaluation Form indicated that that not all of the ACGME Competencies were being measured by the tool, as illustrated below:

**Gaps Identified in Audit of Department of Surgery Resident Evaluation Form**

<b>ACGME Competencies</b>	<b>Assessed by Assessment Form?</b>
Patient Care	X
Medical Knowledge	X
Practice-Based Learning & Improvement	
Interpersonal & Communication Skills	X
Professionalism	X
Systems-Based Practice	

**Auditing the System (Educational Infrastructure)**

In addition to auditing assessment tools, the system that supports the assessment process (educational infrastructure) should also be audited to ensure continuous quality improvement. Performing a “systems check” ensures that the individuals and processes involved with the collection, analysis, and distribution of data are working as intended. Some kinds of questions to consider are:

- How do faculty receive forms used for assessment?
- Are faculty adequately trained to complete the forms?
- Are faculty completing assessment forms and submitting them in a timely way?
- What processes are in place for ensuring that residents with poor ratings/scores receive the follow-up feedback and intervention needed?



Using the worksheet provided below, write in the first column system problems that negatively affect the quality of your assessment of AGCME competencies and outcomes. Brainstorm potential system improvements for each problem and record your ideas in the second column.

<b>Systems Problems Affecting Quality</b>	<b>Potential Systems Improvements</b>



**S – STUDY**

**O – Operationalize**

**A – Audit**

**P - PLAN**

As part of your plan, examine the infrastructure from multiple perspectives for support of program activities:

- Leadership support and buy-in
- Manpower and resources
- Training
- Documentation

### **Leadership Support and Buy-In**

Leadership support with genuine “buy-in” is more important than any other aspect. Some questions to consider are:

- Do positions such as Vice-Chair for Education and Residency Program Director (RPD) appear in organizational charts?
- Do Chairs visibly support RPDs (“walk the talk”)?
- What are the consequences for faculty who participate in residency programs (+ and -)?
- Are resources shared across departmental boundaries?
- Are there financial incentives/disincentives for faculty participation?

### **Manpower and Resources**

The following manpower and resources are indicative of a strong infrastructure:

- Faculty committed to the process who value their contribution/critical role
- Designated staff with explicit responsibility for distribution, collection, analysis, reporting, and follow-up
- Automated data collection (e.g., evaluation forms, work hours)
- Reporting process that provides feedback on faculty performance to chief/chair
- Accessible training

**Training**

A supportive infrastructure ensures that faculty involved in the educational mission have access to training and development. Some useful questions to ask:

- Are new faculty oriented to evaluation forms and the evaluation system?
- Are faculty provided with examples of poor and good evaluations using agreed upon rating criteria?
- Do faculty regularly receive feedback as teachers and raters?
- To what extent is problematic feedback about faculty followed-up?

**Documentation**

Ensuring adequate documentation may require detail beyond the blueprint process. Consider, for example, whether/how/where documentation for the following is provided for each competency and sub-competency:

- Teaching Methodology
- Evaluation Instrument
- Designation of Evaluator
- Frequency of Measurement
- Implementation Timeline

**What Are Your Infrastructure Challenges?**



Using the following worksheet, identify your institution’s infracture strengths (+ column), aspects that could be further developed (Δ column), and ideas for improving them.

+	Δ	Development Ideas
<b>Leadership Support &amp; Buy-In</b>		
<b>Manpower and Resources</b>		
<b>Training</b>		
<b>Documentation</b>		

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## APPENDIX

### ACGME Competencies: Detailed Definitions

(Speciality-specific RRC requirements relevant to the ACGME competencies can be found on the ACGME Website, [www.acgme.org](http://www.acgme.org))

#### PATIENT CARE

Residents must be able to provide patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. Residents are expected to:

- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families
- Gather essential and accurate information about their patients
- Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
- Develop and carry out patient management plans
- Counsel and educate patients and their families
- Use information technology to support patient care decisions and patient education
- Perform competently all medical and invasive procedures considered essential for the area of practice
- Provide health care services aimed at preventing health problems or maintaining health
- Work with health care professionals, including those from other disciplines, to provide patient-focused care

#### MEDICAL KNOWLEDGE

Residents must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g., epidemiological and social-behavioral) sciences and the application of this knowledge to patient care. Residents are expected to:

- Analyze practice experience and perform practice-based improvement activities using a systematic methodology
- Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems
- Obtain and use information about their own population of patients and the larger population from which their patients are drawn
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
- Use information technology to manage information, access on-line medical information; and support their own education
- Facilitate the learning of students and other health care professionals

**PRACTICE-BASED LEARNING AND IMPROVEMENT**

Residents must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their patient care practices. Residents are expected to:

- Analyze practice experience and perform practice-based improvement activities using a systematic methodology
- Locate, appraise, and assimilate evidence from scientific studies related to their patients' health problems
- Obtain and use information about their own population of patients and the larger population from which their patients are drawn
- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness
- Use information technology to manage information, access on-line medical information; and support their own education
- Facilitate the learning of students and other health care professionals

**INTERPERSONAL AND COMMUNICATION SKILLS**

Residents must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their patients' families, and professional associates. Residents are expected to:

- Create and sustain a therapeutic and ethically sound relationship with patients
- Use effective listening skills and elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills
- Work effectively with others as a member or leader of a health care team or other professional group

**PROFESSIONALISM**

Residents must demonstrate a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population. Residents are expected to:

- Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest; accountability to patients, society, and the profession; and a commitment to excellence and on-going professional development
- Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices
- Demonstrate sensitivity and responsiveness to patients' culture, age, gender and disabilities

**SYSTEMS-BASED PRACTICE**

Residents must demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively call on system resources to provide care that is of optimal value. Residents are expected to:

- Understand how their patient care and other professional practices affect other health care professionals, the health care organization, and the larger society and how these elements of the system affect their own practice
- Know how types of medical practice and delivery systems differ from one another, including methods of controlling health care costs and allocating resources
- Practice cost-effective health care and resource allocation that does not compromise quality of care
- Advocate for quality patient care and assist patients in dealing with system complexities
- Know how to partner with health care managers and health care providers to assess, coordinate, and improve health care and know how these activities can affect system performance