

# Implementing an Effective Academic Remediation Program: Results and Consequences



Karen Sharrock  
York Hospital, York, PA



He never recovered from the most recent site visit

*Illustration by David Harbaugh<sup>1</sup>*

- Webster's Dictionary:
- Effective: producing a decided, decisive, or desired outcome
- Academic: based on formal study especially at an institution of higher learning
- Remediation: concerned with the correction of faulty study habits and the raising of a pupil's general competence.

## Background: Standards to Demonstrate Medical Knowledge Competency

York Hospital Surgery Residency Program considers poor performance on the ABSITE examination to be an indication that a resident has not acquired an adequate knowledge base

A minimum total test score of 67% (on the ABSite) is required by each resident to remain in good academic standing. Those residents who score less than 67% correct as the total test (TT) score will be placed on academic remediation, which includes a concentrated course of study devised by the program director.

# Inclusion Criteria

- The total test score value of 67% was chosen because
  - Previous compilation of remediation limits in the literature<sup>2</sup>
  - Reports of an increased failure rate on following ABSite exams for those scoring less than the 30<sup>th</sup> percentile<sup>3</sup>.
  - New RRC requirements

- **2005-2006:**

All residents: Basic Science Curriculum, as well as other interdisciplinary conferences and mock oral conferences.

No remediation plan

- **2006-2007**

As a result of Jan 2006 ABSite results, a remediation plan was developed in February 2006 and implemented for 4 residents out of 15 categorical

- **2007-2008**

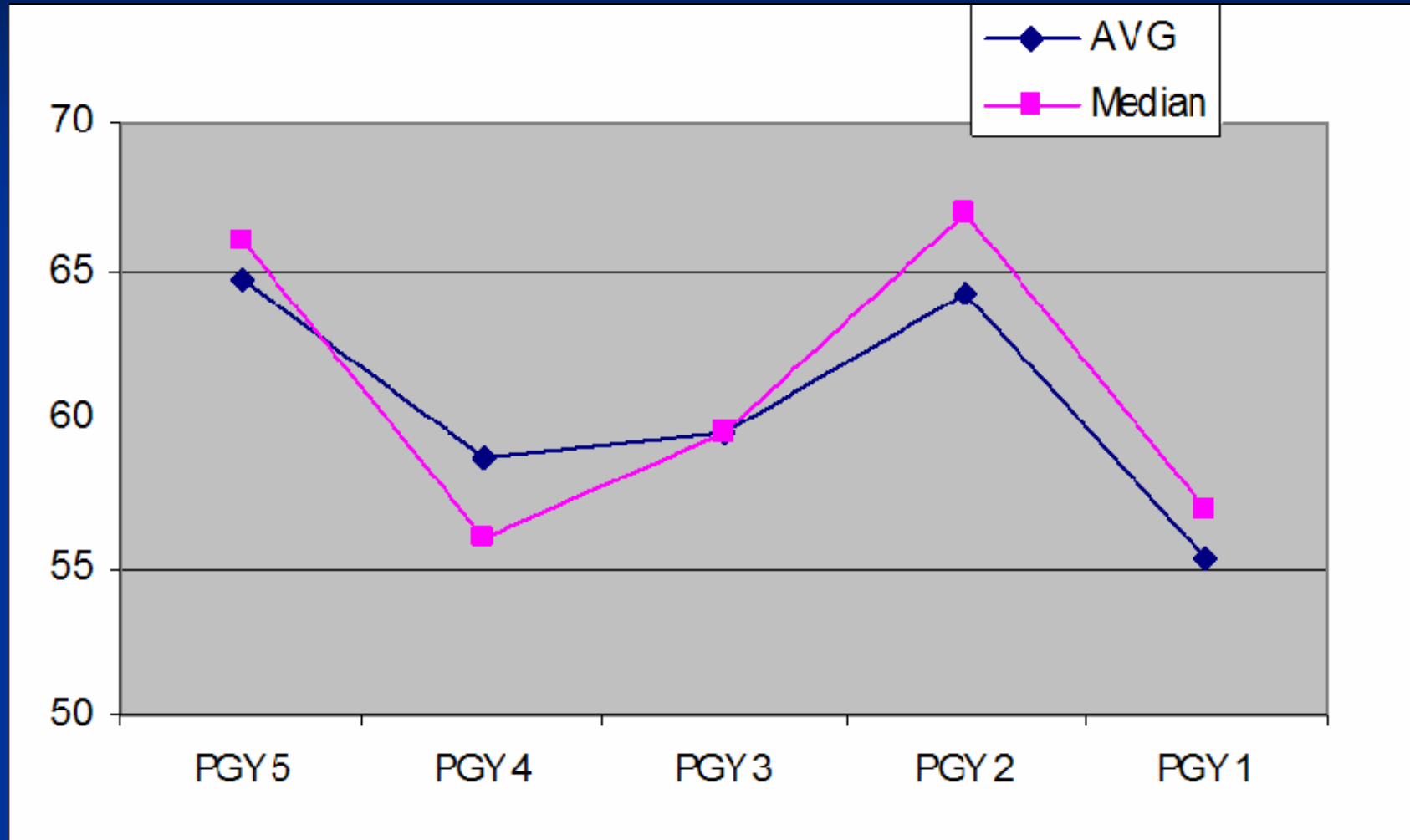
The success of the previous plan year indicated that we should modify the basic science curriculum for all residents to incorporate remediation plan components

Residents (4 of 15) who did not meet the minimum cutoff score were assigned to the full remediation program.

# Basic Science Curriculum CY 2005 (ABSite 2006)

- This conference covers the material present in a program-chosen basic science textbook
- Weekly
- 5 question quiz based on the reading administered to assure that the residents have reviewed the material.
- 100% attendance expected.

# Results 2006



Departmental mean = 60.80, departmental median = 63



# Remediation Curriculum

- Those residents on remediation will:
  - Complete Basic Science Curriculum
  - In addition, supplemental reading will be required from three additional texts
  - SESAP 13 must be purchased by the resident
  - Supplemental monthly exams.

# Remediation Requirements:

- Must receive a “pass” on all rotations
- In House Tests/Quizzes average  $>80\%$
- Next Year's ABSite score must be above  $67\%$  total test score.

# Remediation Requirements (cont'd)

During this period of academic remediation, the resident will be offered the following at no cost:

- General medical examination
- Psychiatric evaluation
- Psychological testing
- Test-taking skills (learning style) assessment and coaching.

# Consequences of Remediation:

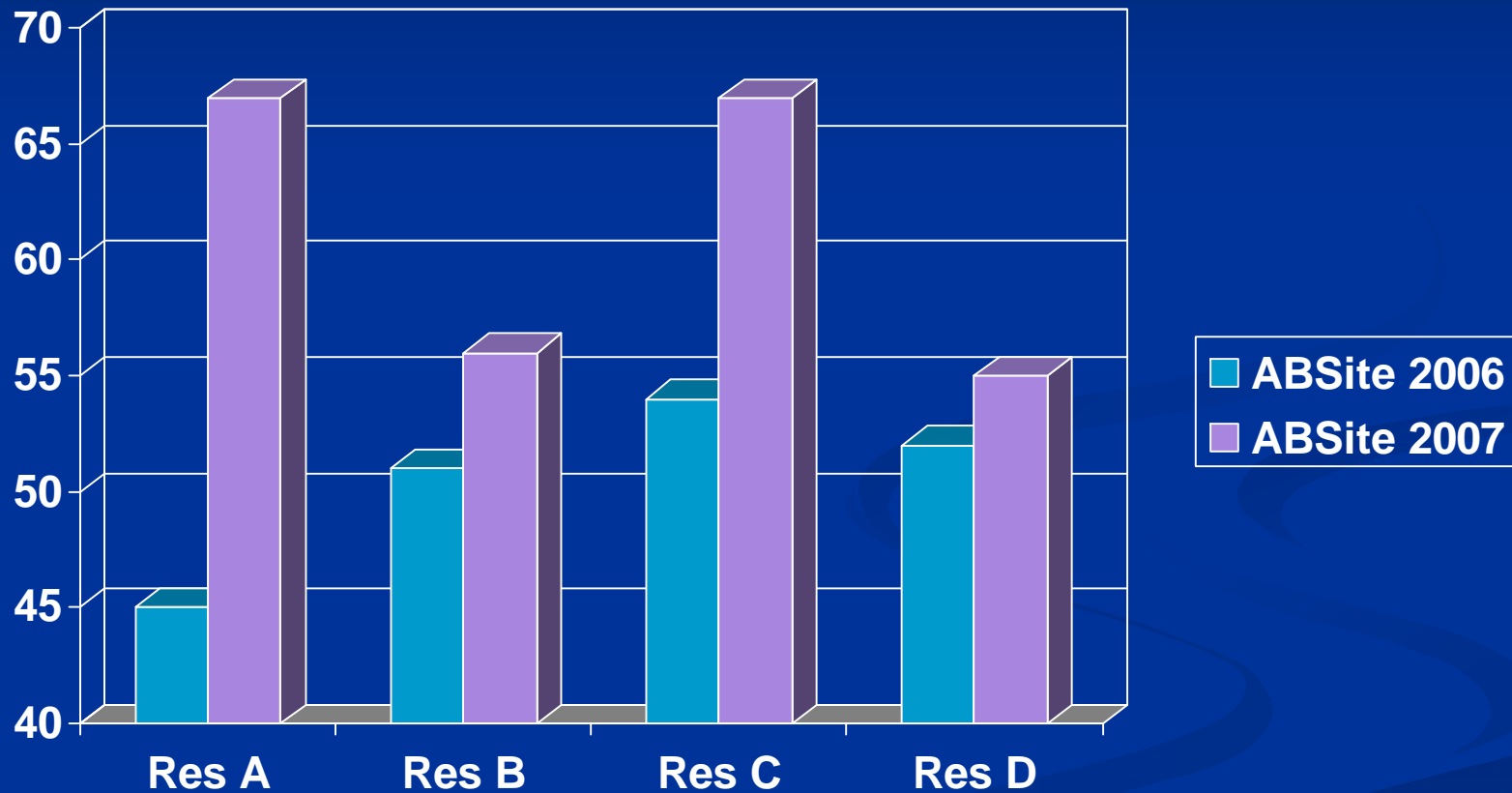
- Lost Privileges
- Vacation Scheduling Priority deferred

# Basic Science Curriculum CY 2006

- This conference covers the material present in a program-chosen basic science textbook
- Weekly
- 5 question quiz based on the reading administered to assure that the residents have reviewed the material
- 100% attendance expected.

# Results:

CY 05 (ABSite 06) vs. CY 06 (ABSite 07):



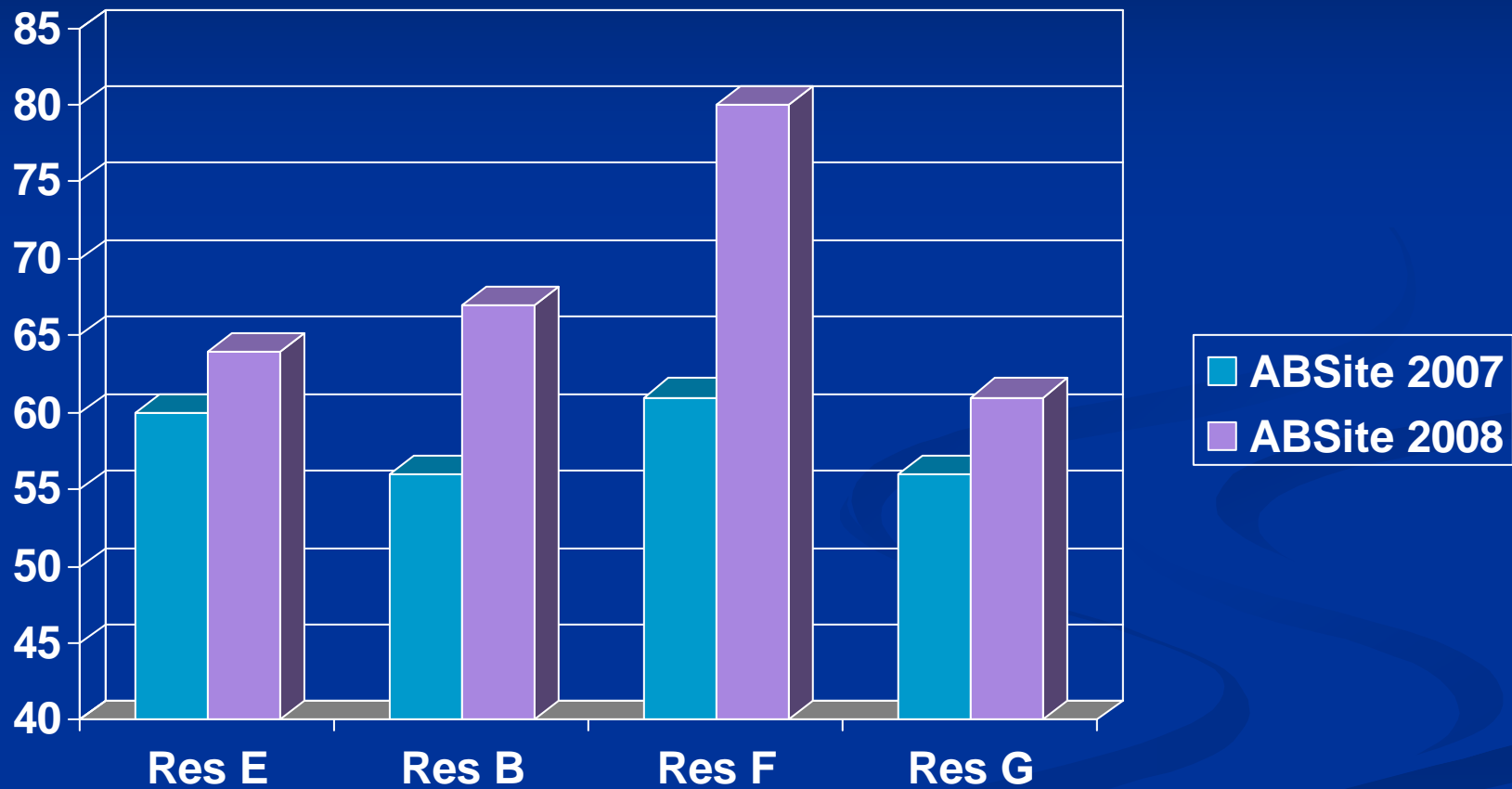
Residents on remediation in 2006

# Basic Science Curriculum Calendar Year 2007

- Basic Science Curriculum was assigned to all residents in the program
- Residents on remediation: monthly 20 question exam
- Addition: bi-monthly 20 question exam given to all residents.

# Results:

CY 06 (ABSite 07) vs. CY 07 (ABSite 08):



Residents on remediation in 2007



If all requirements are met **AND** the resident scores at or above a 67% TT score on the next ABSITE, then s/he will be removed from academic remediation.

However...

# Consequences of Non-compliance:

## Probation or Dismissal

Although the ABSITE examination will not be used as the sole measure of promotion, substandard scores, despite attempts at remediation, combined with poor performance in other areas will lead to academic probation and may be grounds for dismissal from the program

(YH Residency Handbook).

## From the ACGME:

- Surgery RRC, Program Requirements,  
Section V.1.A.1.e

Assessment should specifically monitor the resident's knowledge by use of a formal exam such as the American Board of Surgery In Training Examination (ABSITE) or other cognitive exams.

(ABSITE) Test results should not be the sole criterion of resident knowledge, and

should not be used as the sole criterion for promotion to a subsequent PG level.

# Have the resident repeat a year?

- DIO approval - funding
- Needs RRC approval
- ABS “encourages retention of residents in a program as long as is required to achieve the necessary level of qualifications (ABS booklet, 2008).

# Program Comparison

	<b>2008</b>	<b>2007</b>	<b>2006</b>
<b>median</b>	64.50	64.00	63.00
<b>average</b>	66.08	64.33	60.80

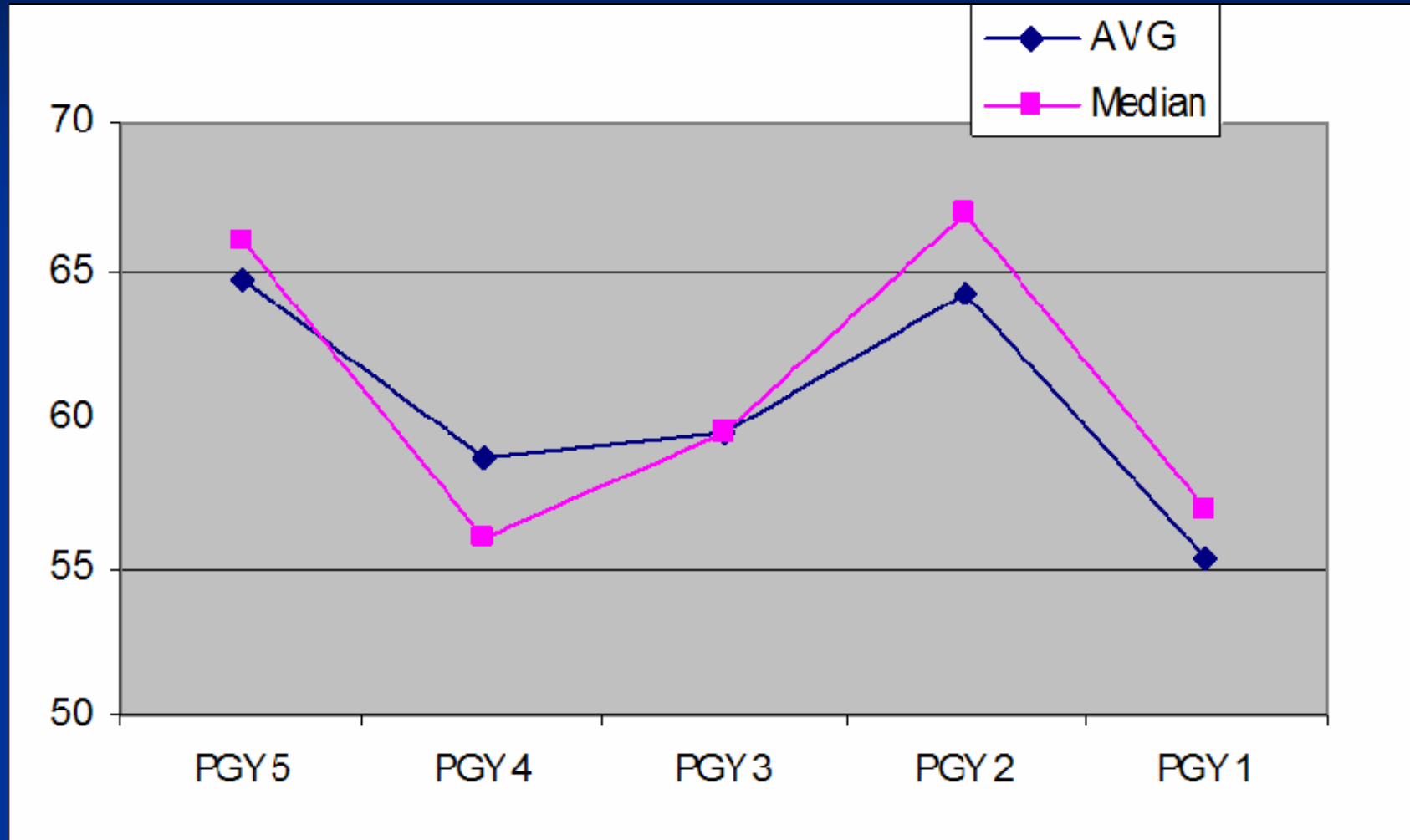
# Comparison by PGY

PGY (as of 2008)	2005	2006 New BS curriculum	2007 New remediation	2008
5	58.5	59.5	65.5	66
4	52.75	64.25	60.5	70
3	n/a	55.3	65.3	60.33
2	n/a	n/a	67	67
1	n/a	n/a	n/a	76

# Overall Findings

- All residents on remediation demonstrated improvement, but some still did not meet the minimum score of 67%
- Previous literature showing documented success in other programs
- d/t improved individual weekly reading effort, curriculum change, fear of consequences?
- Newly discovered - PGY3 dip.

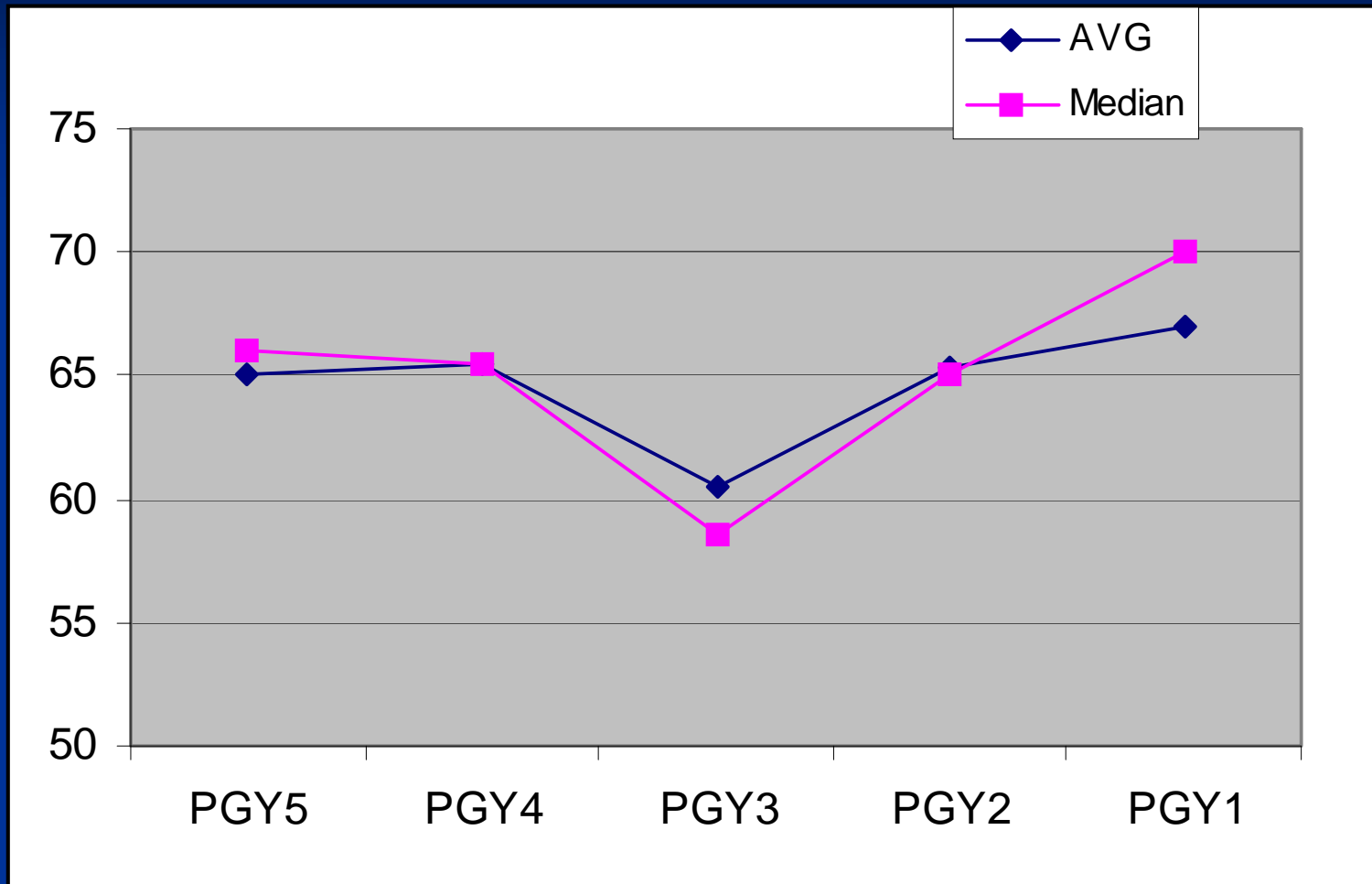
# Results 2006



Departmental mean = 60.80, departmental median = 63

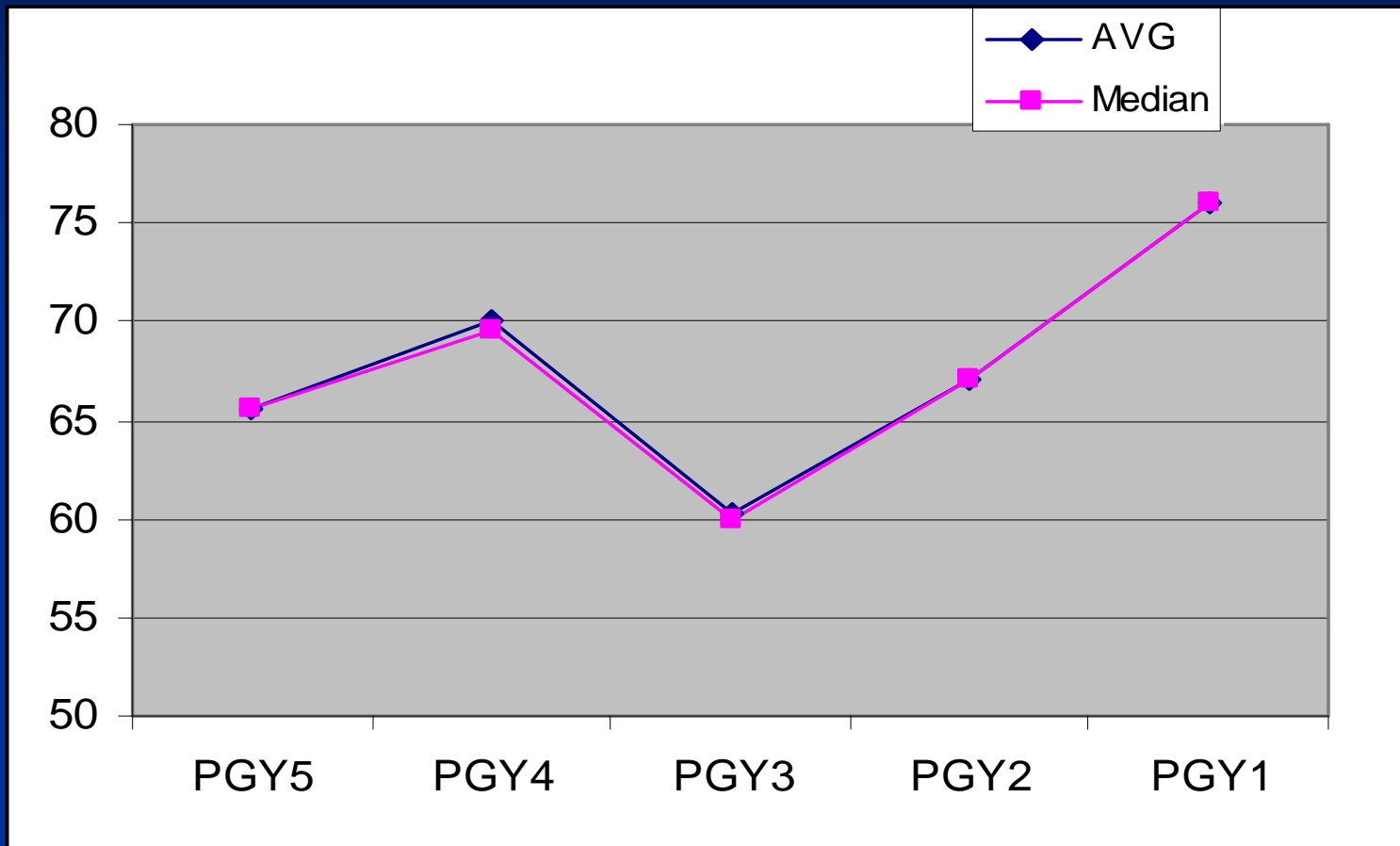


# Results 2007



Departmental mean = 64.33, departmental median = 64

# Results 2008



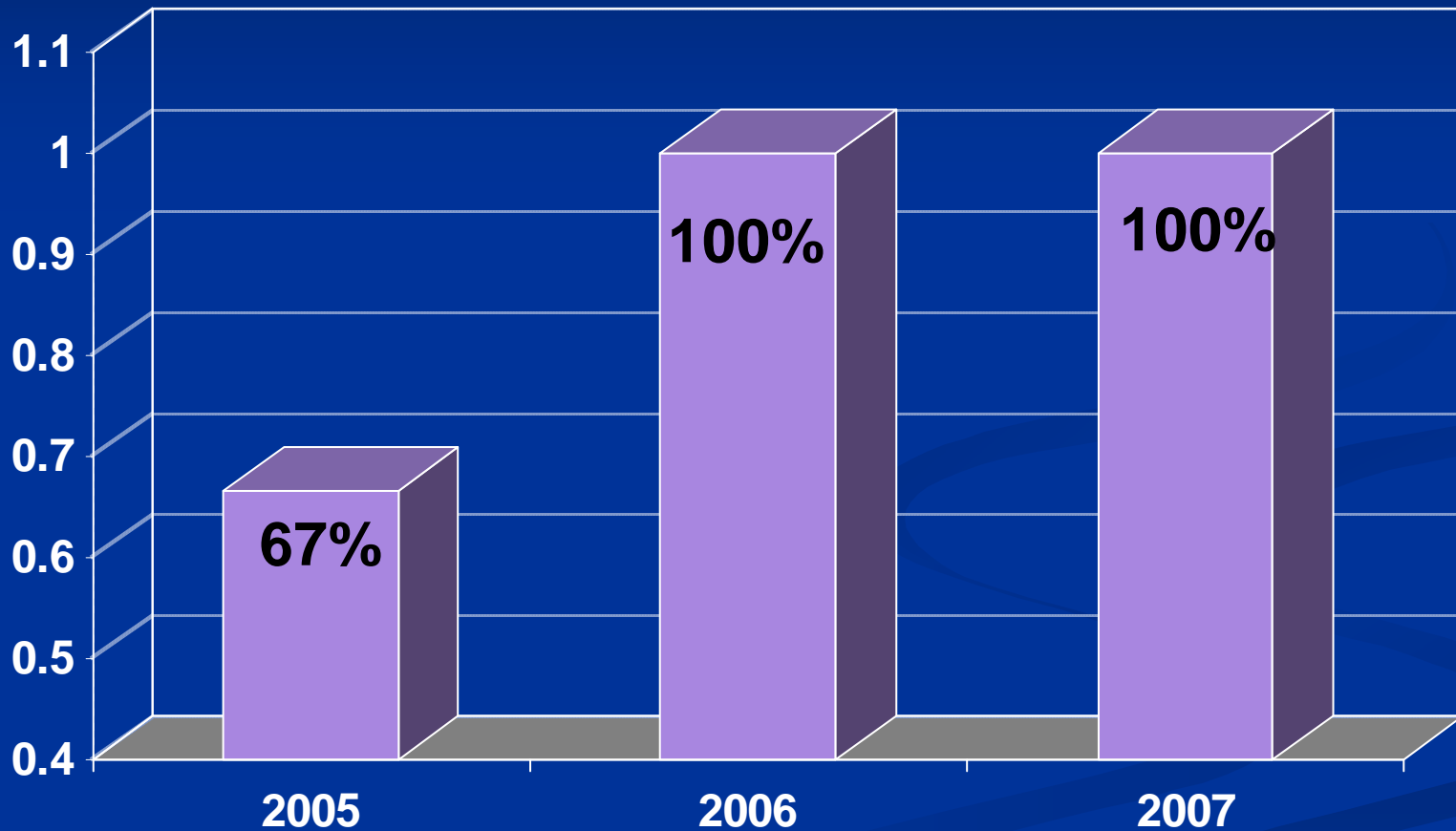
Departmental mean = 66.08, departmental median = 64.5

# Goals:

- Initial purpose of ABSite
  - Measure knowledge
  - Identify deficiencies and potential weaknesses
- Ultimate effectiveness of remediation should be determined by pass rate on QE.

# Review of ABS QE Pass Rate

## First attempt pass rate



# Correlation of Competencies:

- Deficiency in medical knowledge affects other competencies as well:
  - Patient care
  - ICS
  - Professionalism
  - Systems Based Practice
  - Evidence Based Medicine

# Going forward...

- More stringent reliable/valid tests (online surgical database of texts/questions)
- Continue to monitor 1<sup>st</sup> time pass rate, ABS QE
- Perhaps development of transitional curriculum (PGY2 to PGY3)
- Continue remediation program.

# References

- Harbaugh, D. *Residency Program Alert* . HC Pro 2007. HC Pro. 30 March 2008  
<http://www.hcpro.com/content/204657.pdf>
- Harthun NL. Schirmer BD, Sanfey H. Remediation of low ABSITE scores. *CurrSurg*. 2005;62:539-542
- 1. American Board of Surgery. *Interpretation of Results of the American Board of Surgery In-Training/Basic Science Examination*. Philadelphia, PA: American Board of Surgery.; 2005

Questions?



# HUMOR FOR THE DAY ...

Copyright ©2005 Creators Syndicate, Inc.

