



# **The SIS: A New Scale to Measure Support Needs**

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# Presentation Schedule

- ◆ Welcome, Introductions, and Overview
- ◆ The SIS: Why was it developed? What does it do?
- ◆ How to administer and score the SIS
- ◆ Case Studies
- ◆ Uses of Aggregate SIS data
- ◆ Question & Answers & Wrap up



Leo Gillman

*"I know a lot of people will say 'Oh, no —  
not another book about cats.'"*



*"I know a lot of people will say 'Oh, no—  
not another* assessment instrument

# Why was the SIS developed?

- ◆ The *need for types and patterns of support* that most others in the population do not need is the essential commonality among the heterogeneous population of persons with mental retardation/intellectual disabilities and related developmental disabilities.
- ◆ The SIS was developed to provide a tool that allows for reliable and valid measurement of support needs



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# Current assessment instruments do not measure support needs

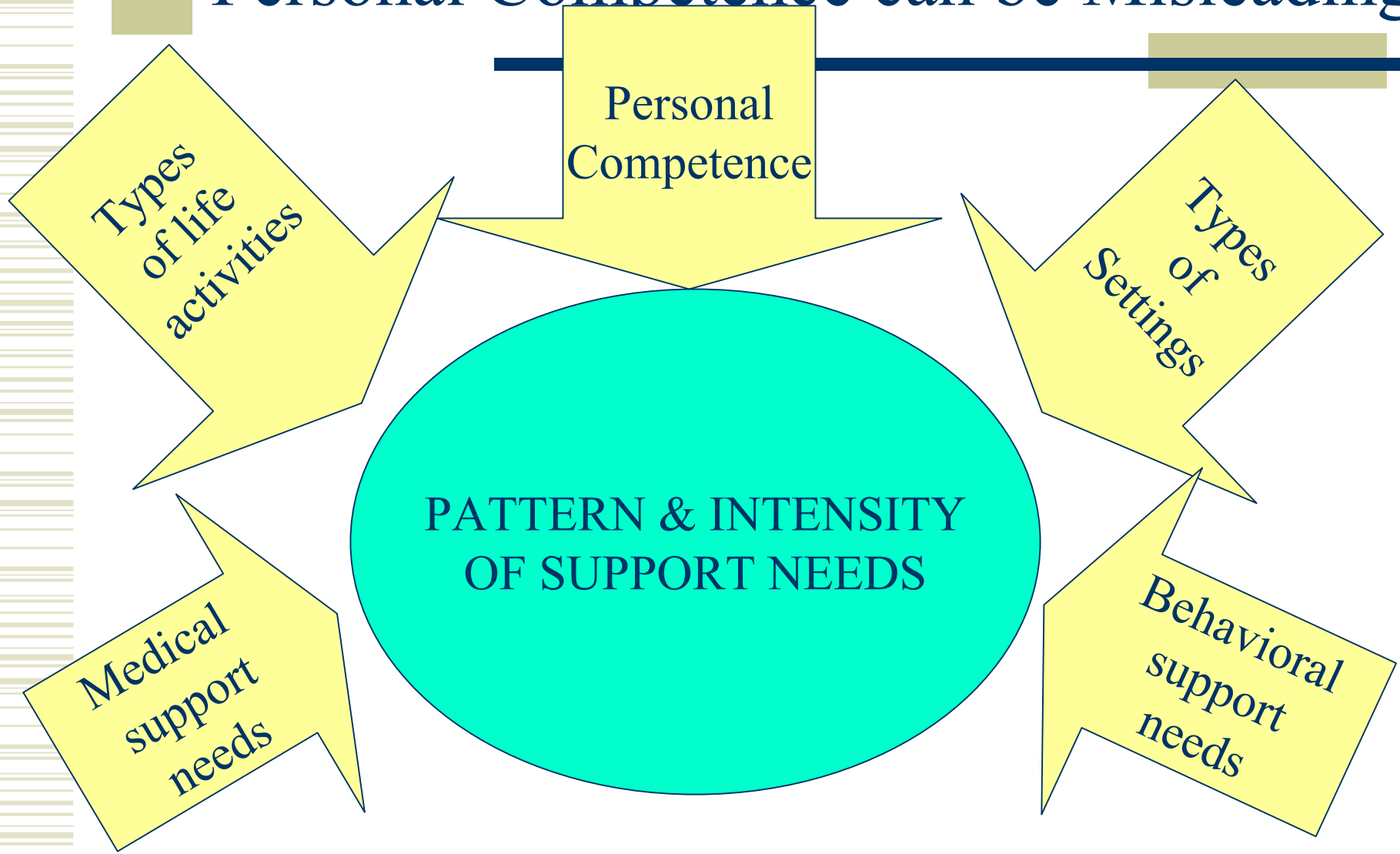
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- ◆ IQ tests and AB scales measure aspects of personal competence, but do not measure support needs

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# Inferring Support Needs from Measures of Personal Competence can be Misleading

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The SIS attempts to measure the relative intensity of an individual's support needs directly – other assessment instruments provide indirect measures



# The SIS:



- ◆ Is intended to assist planning teams in making clinical judgments regarding an individual's support needs
- ◆ is intended to be used as part of an support needs assessment and planning process (see handout)

Component 1:  
Identify desired life  
experiences and goals

Component 2: Determine  
the Intensity  
of Support Needs

Step 3: Develop the  
Individualized Support Plan

Step 4: Monitor Progress





# The 3 Sections of the SIS

- ◆ Section 1 identifies exceptional support needs related to medical and behavioral concerns
- ◆ Section 2 lists an array of life activities against which an individual's support needs are rated in regard to frequency, duration, and time.
- ◆ Section 3 promotes consideration of support needs related to protection and advocacy activities

# The SIS Support Indices

- ◆ The *SIS Support Needs Index* is a norm referenced support needs score – provides an indication of an individual's intensity of support needs relative to other people with mental retardation and related developmental disabilities
- ◆ The *Support Needs Profile* summarizes a person's relative intensity of needed support across six different life areas.

# The Support Needs Profile - Sample

%tile	Home Living	Community Living	Life Long Learning	Employment	Health & Safety	Social	SIS Support Needs Index	%tile
<b>99</b>	17-20	17-20	17-20	17-20	17-20	17-20	>131	<b>99</b>
	15-16	15-16	15-16	15-16	15-16	15-16	124-131	
<b>90</b>	14	14	14	14	14	14	120-123	<b>90</b>
	13	13	13	13	13	13	116-119	
<b>80</b>							113-115	<b>80</b>
	12	12	12	12	12	12	110-112	
<b>70</b>							108-109	<b>70</b>
							106-107	
<b>60</b>	11	11	11	11	11	11	105	<b>60</b>
					11		102-104	
<b>50</b>	10	10	10	10	10	10	100-101	<b>50</b>
							98-99	
<b>40</b>	9	9	9	9	9	9	94-96	<b>40</b>
							92-93	
<b>30</b>							90-92	<b>30</b>
	8	8	8	8	8	8	88-89	
<b>20</b>							85-87	<b>20</b>
	7	7	7	7	7	7	82-84	
<b>10</b>	6	6	6	6	6	6	75-81	<b>10</b>
	5	5	5	5	5	5	<74	
<b>1</b>	1-4	1-4	1-4	1-4	1-4	1-4		<b>1</b>

# How the SIS was developed

- ◆ Literature Review – 12 initial support areas
- ◆ A Pool of 130 indicators across the 12 areas was developed Q-Sort was used to reduced and validated the initial item pool
- ◆ An initial SIS requiring ratings of frequency, daily support time, and type was developed
- ◆ 4 Field Tests involving 1,700 consumers have been used to expand and refine the instrument

# Reliability of the SIS

## ◆ Reliability

- Internal Consistency Statistics Extremely High
- Standard Error of Measurement Very Low
- Interscorer Reliability is Excellent
- Test-Retest Reliability is Good
- Inter-rater reliability is Fair

# Validity of the SIS

## ◆ Validity

- Content Validity established through lit review and Q-Sort
- Content Validity verified through strong item discrimination index
- Criterion Validity confirmed through strong correlations with raters measures of support needs
- Construct validity was ascertained through item validity measures as well as correlations of SIS scores with AB and IQ measures



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# Review of Section 1

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- ◆ Look Over Section 1: Exceptional Medical and Behavioral Support Needs and the item descriptions from the handout
- ◆ Any Questions?

# Rules for Section 2

- 1. Complete all items even if the person has no intention of participating in a particular life activity or if a life activity is not applicable to the individual.**
- 2. Complete items based on supports that would be necessary for the individual with disabilities to be successful in each activity.**
- 3. It is perfectly acceptable to consult with others who know the individual in determining an appropriate rating for any item.**

# When completing SIS Section II:

- ◆ Responses need to indicate support needs, whether or not those services or supports are currently provided or available.
- ◆ Ratings should reflect the supports that would be necessary for this person to be successful in the activity.
- ◆ Continuation of supports received currently need not be wanted, and some needed supports may not in fact be provided. Responses should reflect the type of support that would have to be available to permit the individual to engage in that activity successfully should they ever so desire.



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## Review of SIS Sections 2 & 3

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- ◆ Look Over Items on Section 2 & 3, and corresponding item descriptions
- ◆ Any Questions?

# Supports Intensity Scale

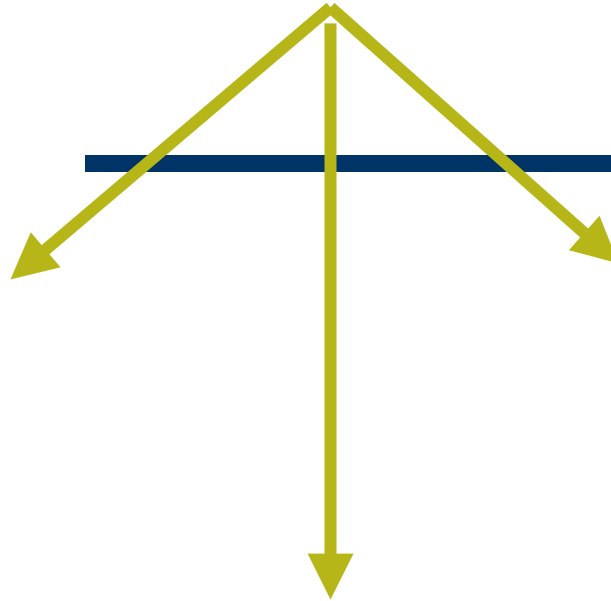
## Case Vignettes

Darlene Simmons

Juan Garcia

Melvin Thurber

# A Quick Overview of the 3 Cases



**Darlene Simmons**  
35 years old

- No sig. medical
- No sig. behavioral support needs

**Melvin Thurber**  
30 years old

- No sig. medical
- Significant behavioral support needs

**Juan Garcia**  
21 years old

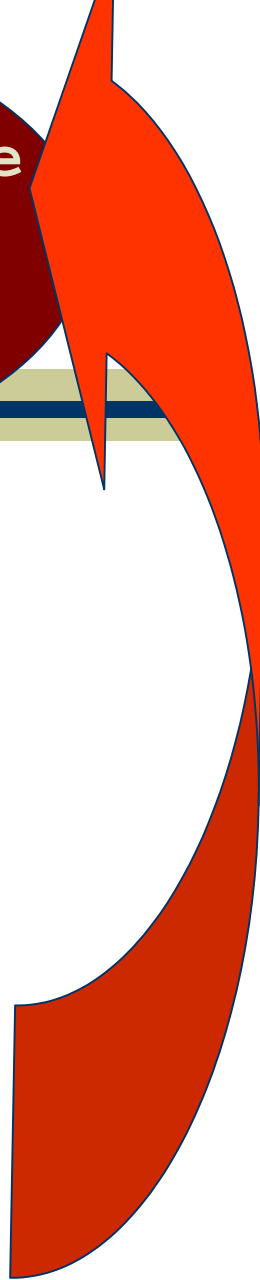
- Significant medical
- No sig. behavioral support needs

Component 1:  
Identify desired life  
experiences and goals

Component 2: Determine  
the Intensity  
of Support Needs

Component 3: Develop the  
Individualized Support Plan

Component 4: Monitor Progress



# Individualized Support Plan

## Elements:

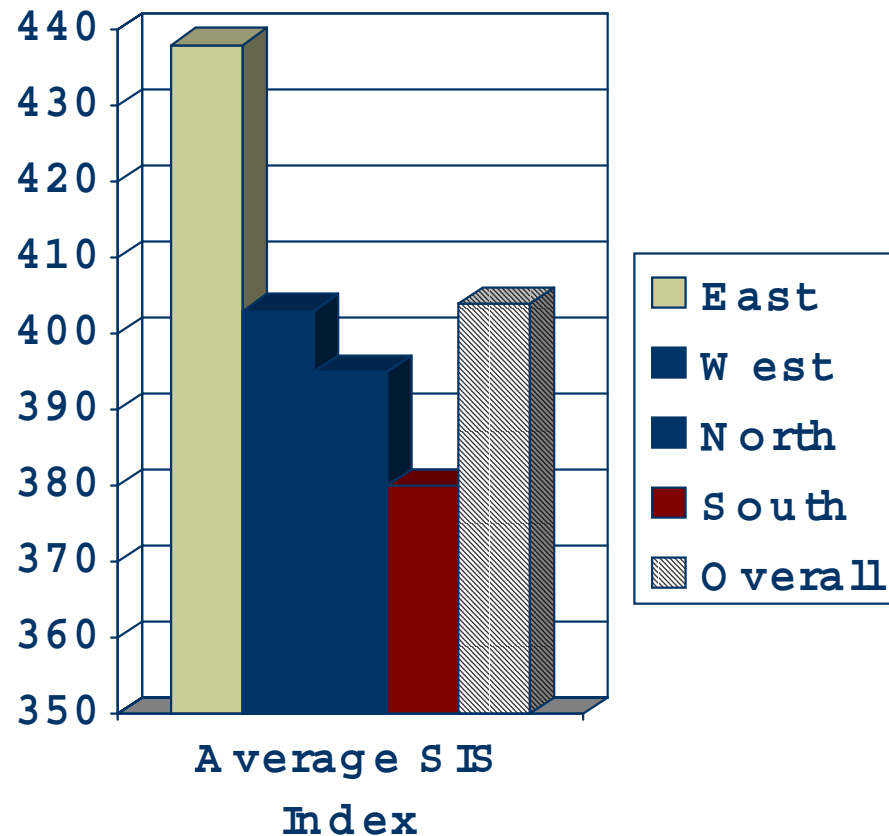
- ◆ **Current Daily Activities and Environments**
- ◆ **Interests, Preferences, and Desired Outcomes**
- ◆ **Needed Support Areas, Activities, and Settings**
- ◆ **Specific Support Functions and Natural Supports Available to Address Support Needs**
- ◆ **Progress Evaluation Plan**

# Aggregate SIS Data

- ◆ Four Useful Ways to Analyze Aggregate Data
  - Descriptive Analyses
  - Resource Allocation Analyses
  - Funding Analyses
  - Co-variety Analyses
- ◆ Thoughts on Classification by SIS scores

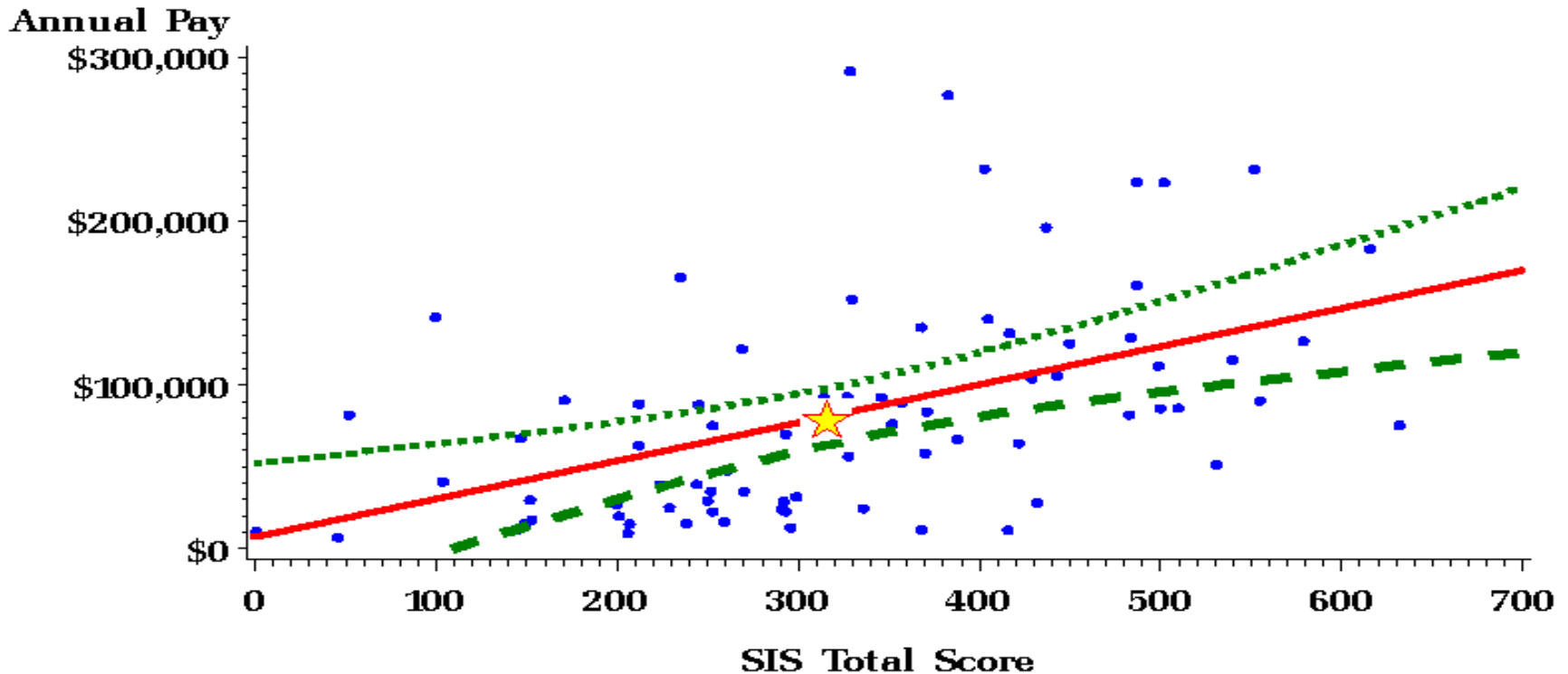
# Descriptive Analyses – an example

- ◆ Summary statistics on a population served by a state, region, or organization – for example:
  - Distribution of SIS Support Needs Index Scores (see graph)
  - Distribution of Subscale Scores
  - Distribution of Exceptional Medical and Behavioral Support needs
  - Association between descriptive variables (e.g., funding and SIS scores)



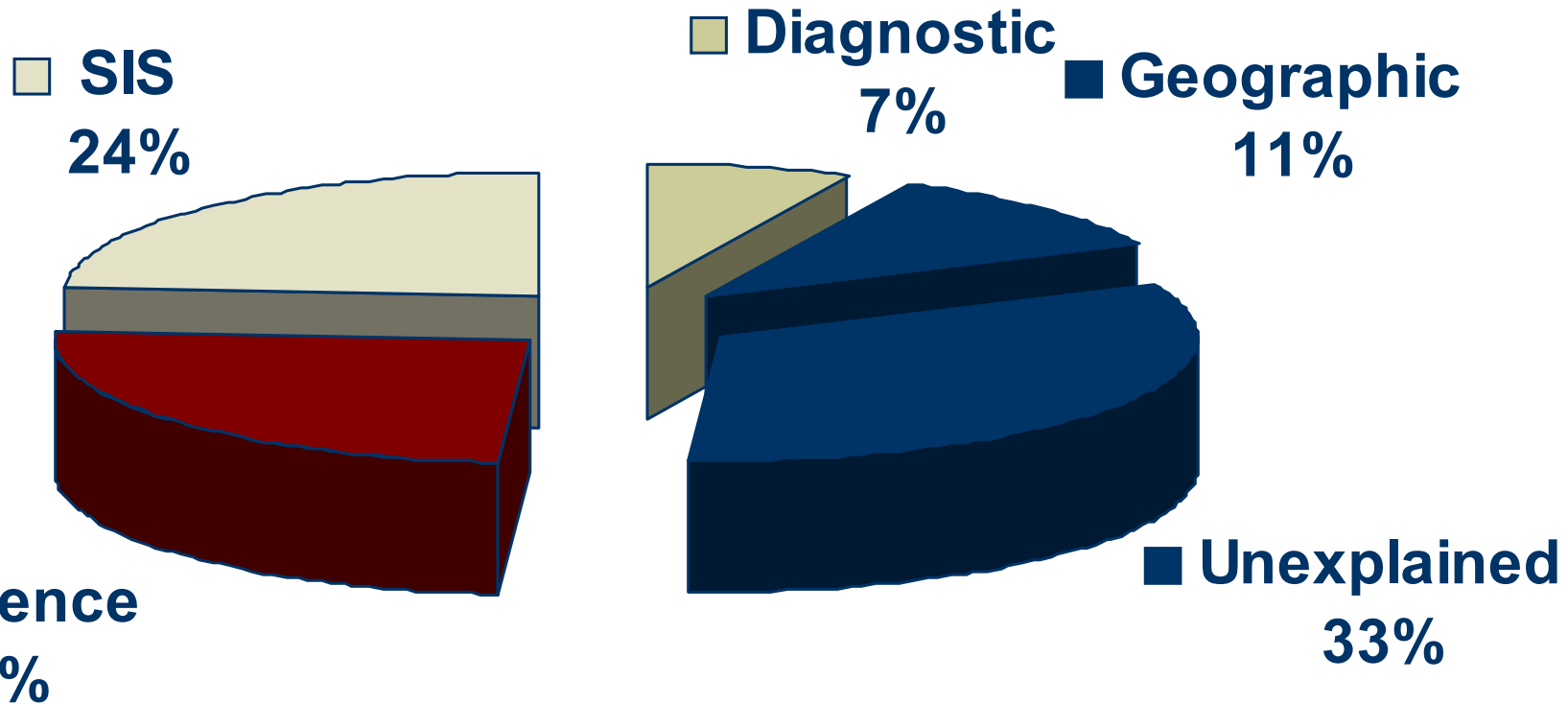
# Resource Allocation Analysis – an example

**Regression of Annual Reimbursement Amount on SIS Total Score**  
**Primary Residence = Own Home with Supports**

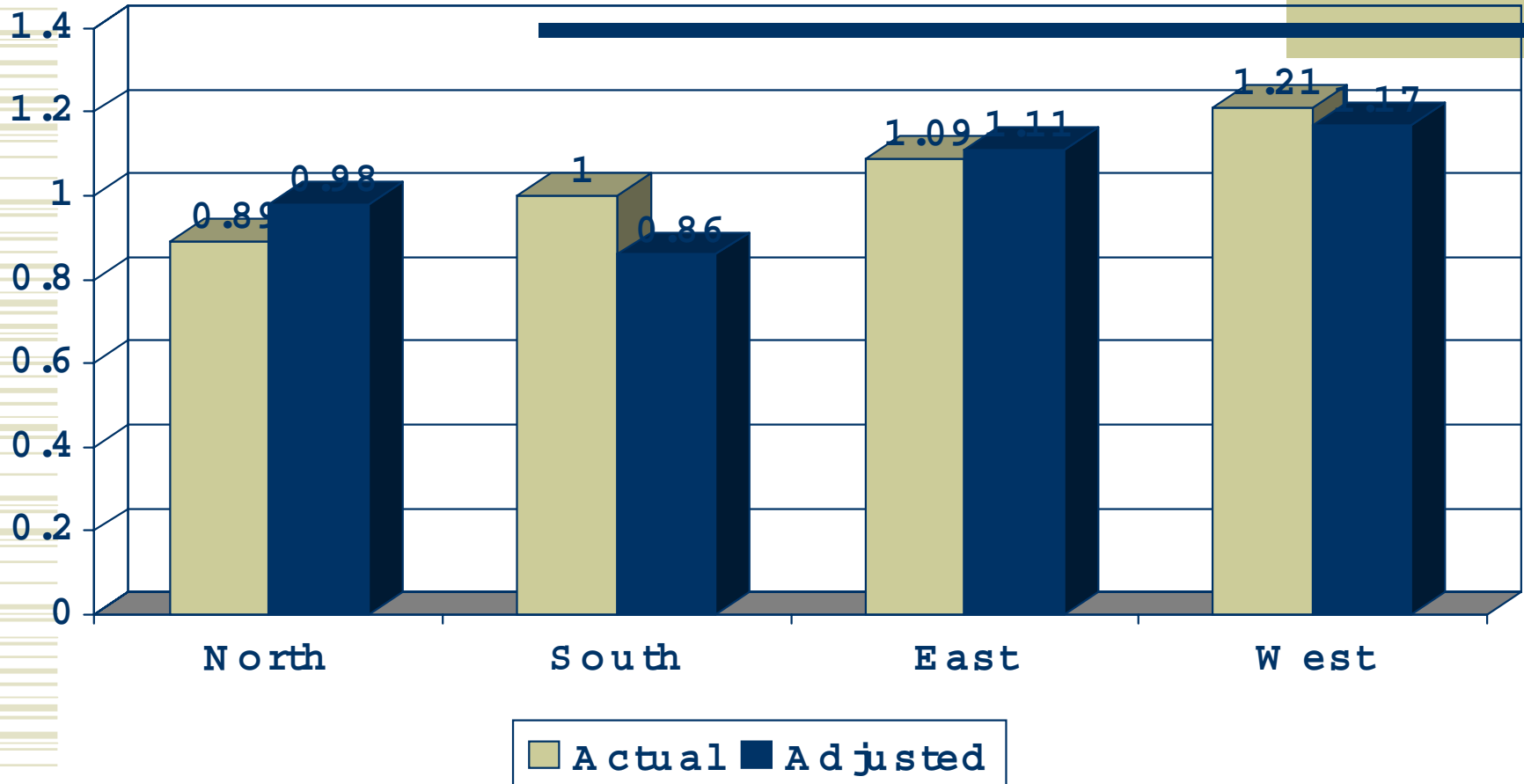


Dotted lines are 99% confidence limits

# Funding Analyses Using Blockwise Regression



# Independence by Region Using Covariate Analysis



# Comments on Classification by SIS Support Needs Index

- ◆ The SIS is a continuous measure – any grouping or classification would be at an arbitrary cut point
- ◆ ILEP (from 1992 and 2002 AAMR manuals) requires qualitative judgments, not just based on SIS factors (frequency, time, and type)
- ◆ If a compelling reason to classify exists, then SIS scores could be used

# Final questions, comments, or thoughts on the SIS

