

Using Standardized Test Data to Drive Curricular Change

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Disclosure & Learner Outcome

The presenters have no conflicts to disclose.

The learner will be able to create a process using standardized test data that evaluates student learning to drive curricular change.

Background

- HESI™ Medical Surgical Specialty Examination

- Benchmark to measure student learning

(Brunnert, Vesey, Mee, & Ambrose, 2005)

- 900 - the minimum recommended performance

- Mean scores F15 - Sp17 did not meet benchmark

- Faculty Collaboration

- Pathophysiology/pharmacology
- Medical-surgical concepts

Human Needs Framework

Physiological

- Activity and Rest
- Nutrition
- Elimination
- Fluid and Electrolytes
- Oxygenation & Circulation
- Regulation, Sensation, & Perception
- Safety & Comfort
- Cellular Adaptation
- Reproduction

Social

- Love, belonging, and approval
- Important that this process is reciprocal



Psychological

- Understanding, order, & predictability
- Adequacy, competency, & security
- Self-esteem, worth, & identity
- Personal growth and fulfillment

Spiritual

- Relatedness
- Meaning
- Values
- Hope
- Forgiveness

Methods

- Analysis of assessment data

SPRING 2018 MED/SURG HESI RESULTS BY COHORT AND ALL OF LEVEL 2			
WEEKS 1-7 Spring 2018 Med Surg HESI Concepts: Cohort Mean 914 (n=72)		Level 1 # of ?s	Level 2 # of ?s
(11) Cardiovascular			894 7
(12) Endocrine			858 8
(13) GI/Hepatic	955	7	
(14) Immune/Hematology			989 6
(15) Integumentary	957	7	
(16) Musculoskeletal	838	4	
(17) Neurological			971 5
(18) Oncology			876 3
(19) Operative	1106	6	
(20) Physical Assessment	1027	5	
(21) Renal	877	7	
(22) Respiratory			944 5
(23) Reproductive			1073 2
(24) Sensory			1111 3
(25) Trauma/Emergency			nd Nd
TOTAL WEEKS 1-7 Spring 2018 Med Surg HESI Concepts:		960 36	965 39

- Need to remediate concepts learned in previous courses
- Blend those concepts with current learning

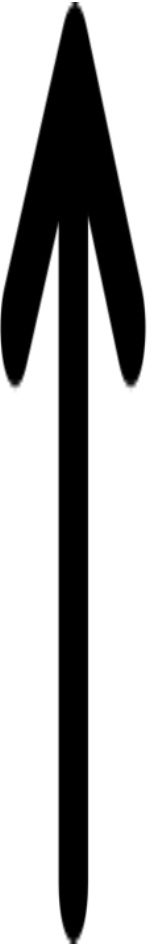
Methods

- Faculty collaborated and agreed to
 - Integrate previously learned content into
 - Patho/Pharm and Med/Surg courses
 - Faculty-led tutoring
 - Comprehensive exams
 - Content from past semesters (20%)
 - Current course material (80%)

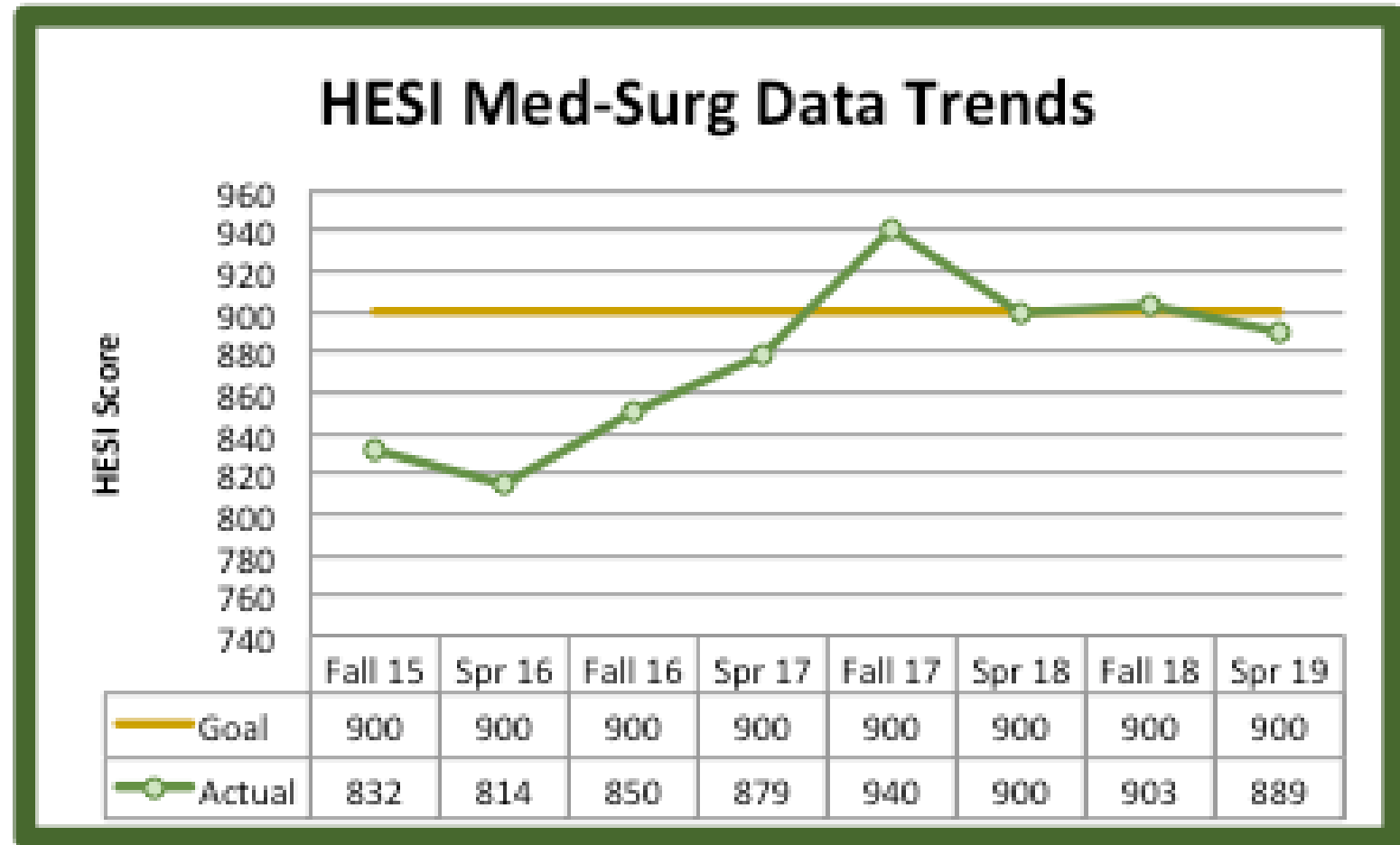


Results

- During the first semester, average HESI™ scores
 - Increased 847 to 936 in the generic track (9%)
 - Increased 879 to 943 in the accelerated track (9.3%)
- Program data trends over the next two years
 - Revealed average HESI™ scores of 908
 - Continue to meet the established criterion



Trends



Implications for Practice

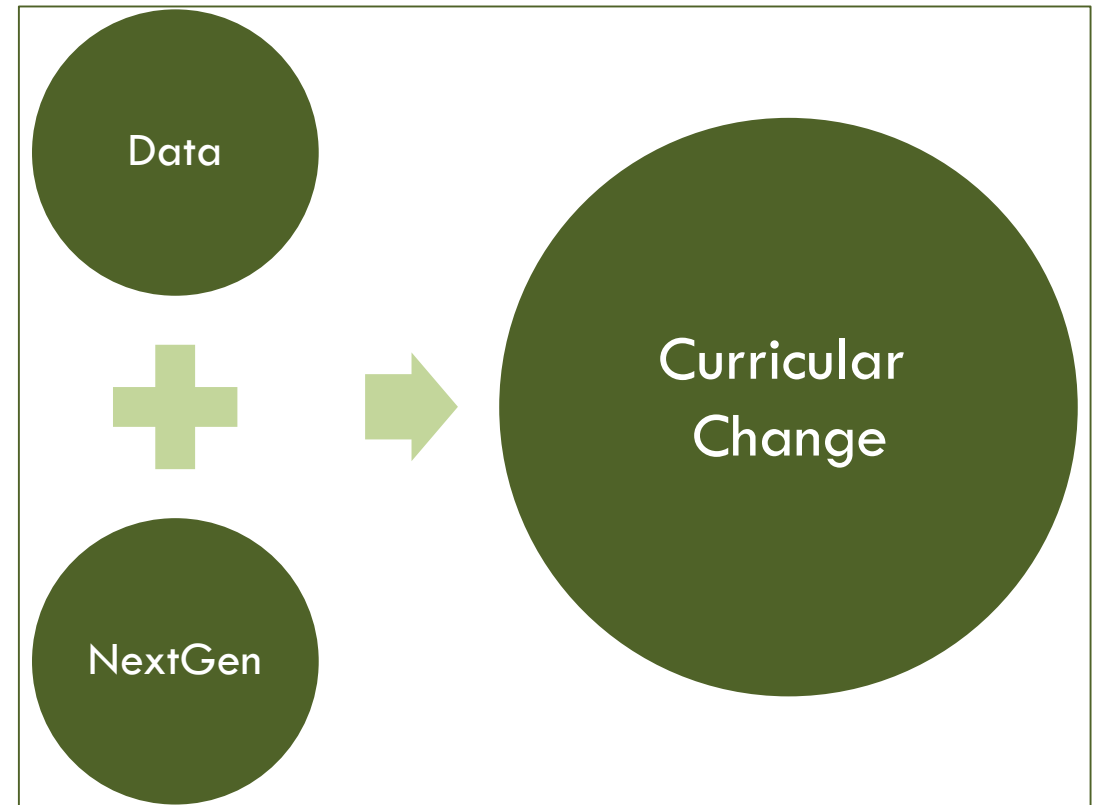
- Analysis of data trends inform faculty of student needs and drive the development of strategies to
 - Promote student learning
 - Judge student performance
 - Determine competence to practice

(Oermann & Gaberson, 2016)



Next Steps

- Educational assessment using trended data from national standardized tests is a resource to help inform curricular decisions



NextGen (Dickison, Haerling, & Lasater, 2019)

References

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