

Clinical Vignettes in Health Services Research: Advantages and Limitations of Different Formats

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Background

Using real patients in some areas of health services research and medical education is:

- Logistically difficult;
- Burdensome; and
- Potentially unethical.

Health services researchers, medical educators and credentialing organizations increasingly use clinical scenarios/vignettes to avoid these obstacles.

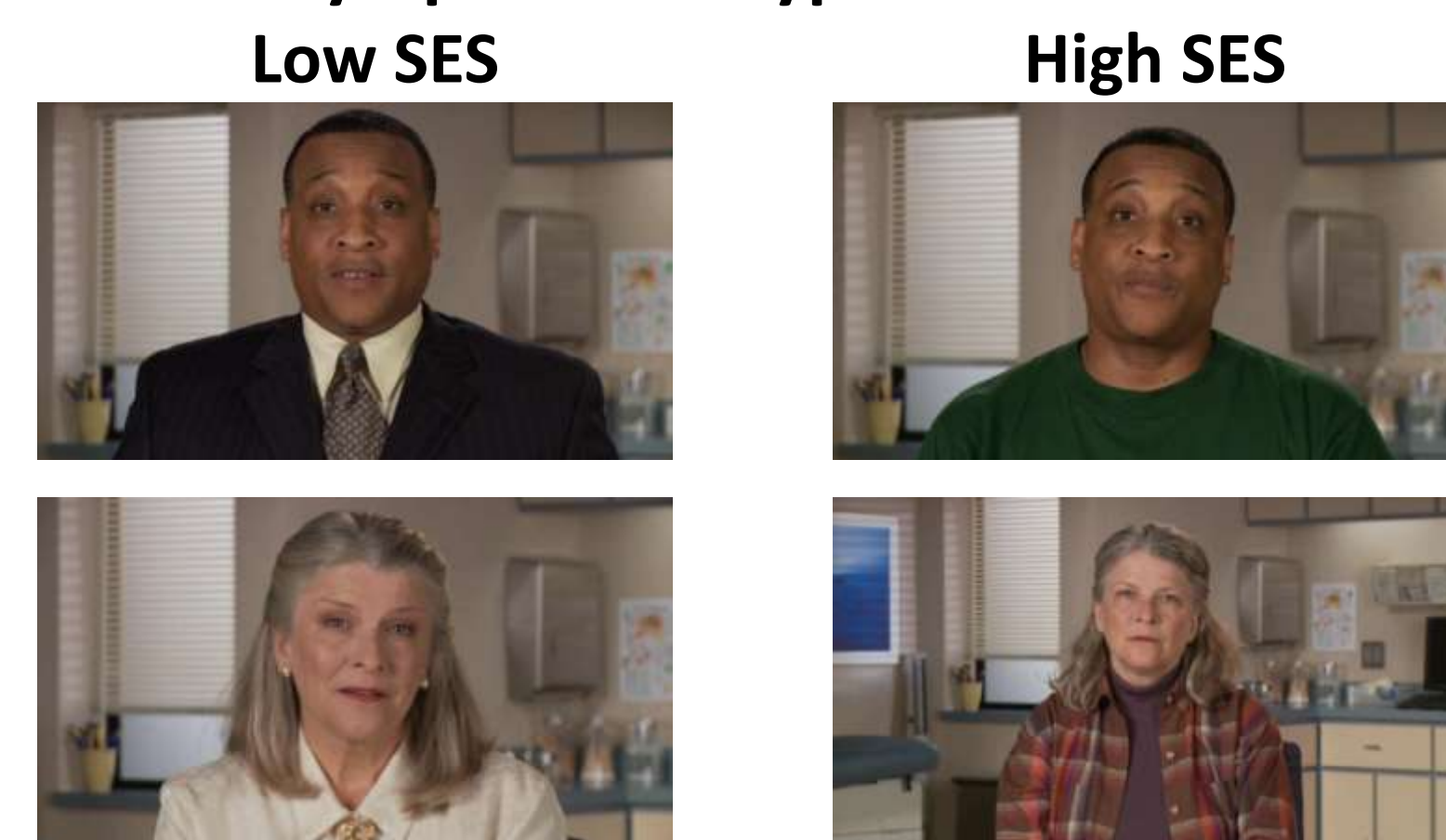
Brief History of Vignettes

- **Written Scenarios:** Scenarios have been cost-efficiently used as written scripts for many decades, but their realism and validity have been challenged.
- **Introduction of first Standardized Patient (1963):** Standardized patients provide some advantages, although cost, inconsistency of presentation and believability remain limitations.
- **Video Vignettes:** High resolution video vignettes of patient actor using clinically authentic scripts build upon earlier approaches. Sharing some of the limitations of earlier modes (especially external validity), they provide distinct advantages.

Using Vignettes to Measure Disparities

- The “patient” differs only in their appearance (male or female, lower vs. upper SES, race/ethnicity).
- Despite identical clinical presentation, they received significantly different diagnoses and management for their diabetes.

The same “patient” presenting identical signs and symptoms of Type 2 diabetes



“Robert Tompkins”

“Nancy Jacobs”

Findings

Video Vignettes Provide Many Benefits over Other Formats:

- **We have successfully identified and measured healthcare variations** (the healthcare received by the “patients” depicted (*See Figure*) differed significantly).
- **Use of video has disentangled patient, provider and organizational-level contributions** to healthcare disparities.
- Videos are **easily incorporated in different types of HSR studies** (e.g., factorial experiments and surveys and qualitative methods).
- We have **successfully used in cross national healthcare studies**.
- Physician responses indicate **they have high external validity**.
- They are easily employed in **distance learning** (on-line educational programs).

Advantages or Disadvantages of Video Scenarios, Standardized Patients (SP) and Written Vignettes

	Video-based scenarios	Standardized patients (SP)	Written scenarios
Insert non-verbal cues (i.e., Levine Fist)	✓	✓	
Strict standardization	✓		✓
Realism	✓	✓	
Believability	✓		✓
Time and cost (\$)	✓		✓
Socio-emotional components	✓	✓	
Complex symptom presentation	✓	✓	
Incorporate surrogates (i.e., dialect)	✓		
Promotes real-time reaction	✓	✓	
Vary non-modifiable risk factors	✓		✓
More robust comparison (nat'l, int'l)	✓		

✓ = Advantage

Conclusions

- Clinical vignettes have **many advantages** over both written scenarios and standardized patients (*See Table*).
- Clinical vignettes are now an **established method** in medical education and health services research.
- **Content and technologies continue to improve** in the delivery of high quality and high impact video.
- **Scientific legitimacy** is underscored by numerous publications in major scientific journals.
- **Initial resistance to use of video-based clinical scenarios has dissipated** – they are now viewed as an important addition to the armamentarium of health services research.
- Clinical vignette methods **continue to evolve** with emerging new technologies (like web based, smart phones, avatars) and their full potential is yet to be fully realized.

Implications

Filmed vignettes, now widely accepted in health services research and employed in medical education and credentialing, provide distinct cost and quality benefits.

They have advantages in identifying variations in healthcare because they:

- Are amenable to **different modes of administration** (in-person interviews or via the internet).
- Are able to access otherwise **hard to reach populations** (such as rural doctors).
- Allow for cost efficient access to **national samples** (previously cost prohibitive).
- Address **multilingual communities** (such as doctors in largely Hispanic practices).
- Measure **cross national variations in healthcare** between different national systems.
- Are cost-efficiently **repurposed** for other uses like medical training or quality improvement initiatives.