

# Health Literacy Intervention in Primary Care Settings



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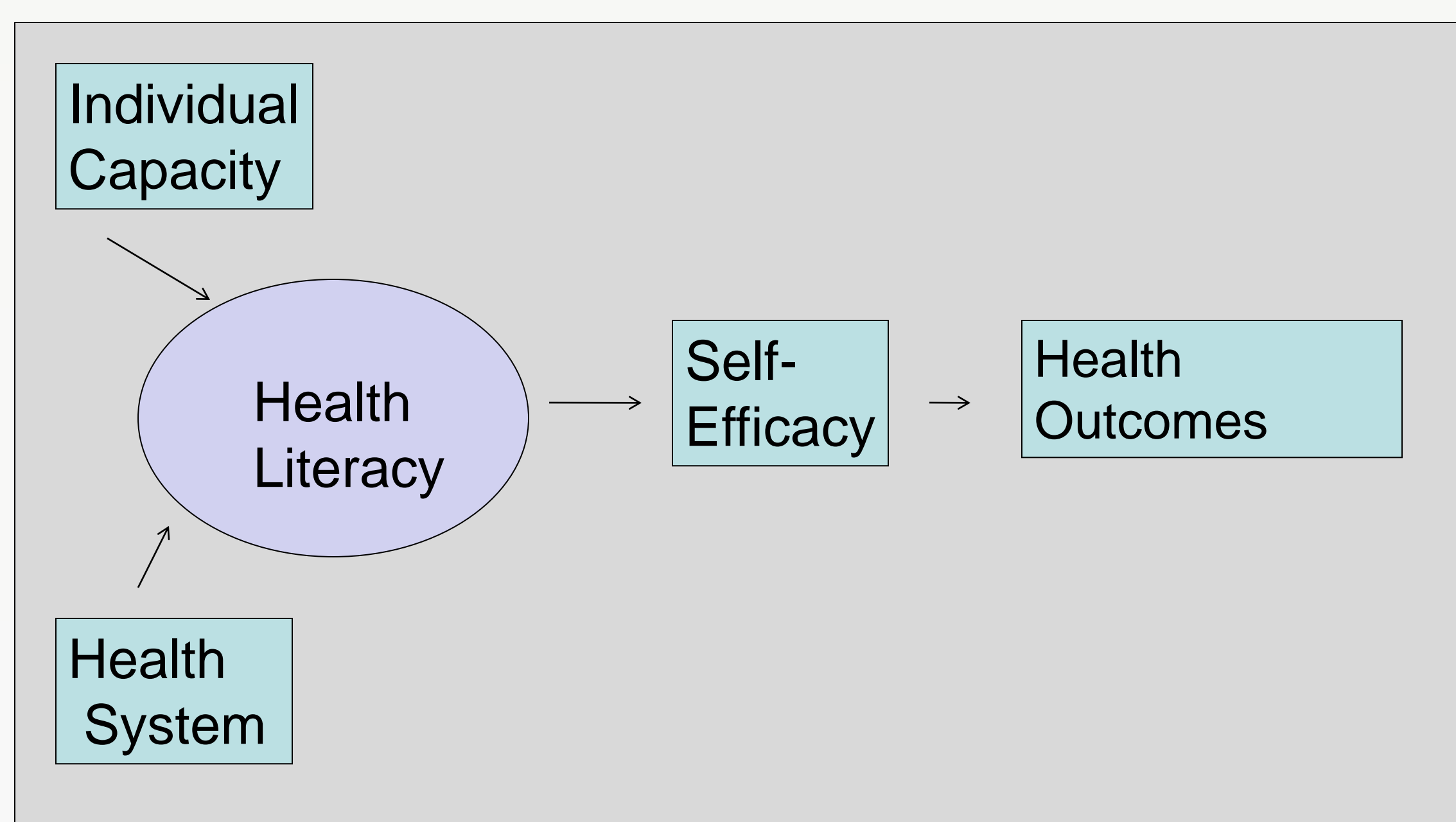
## Health Literacy

the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions

## Background

- Limited health literacy is associated with poor health status
- Complex concept – reading and writing printed materials
- Numeracy, listening, and speaking skills
- Most patients forget 80% of what HCP tells them right after leaving office
- 50% of what is remembered by patients is incorrect information
- HCPs often lack awareness of patient inability to understand treatment plan
- Stronger predictor of health outcomes than race/ethnicity age, income, or education

## Framework



## Purpose

- Assess the health literacy levels of diabetic patients using medical services provided in a primary care setting
- Improve diabetic health outcomes by implementing a health literacy intervention

## Methods

- One group pre/post test design
- Sample consisted of 54 diabetic patients receiving services at free urban clinic
- Health literacy awareness campaign implemented
- Clear Health Communication Ask Me 3 program.
- Interpreter was used for data collection and working with Spanish speaking participants
- 6 month follow up

## Measures

- Pre Intervention
- Health literacy – Newest Vital Sign
  - Perceived health status – SF-12
  - Diabetes Empowerment Scale
  - BP, BMI, A1c, HDL, LDL
  - Demographic information
- Post Intervention
- Perceived health status
  - Diabetes Empowerment Scale
  - BP, BMI, A1c, HDL, LDL

## Intervention

- Health Care Providers
- Presentation on Health Literacy Clear communication
  - Brochures and posters in clinic
- Patients
- Presentation on understanding health related information
  - Ask Me 3 questions - nurses, physicians, pharmacists



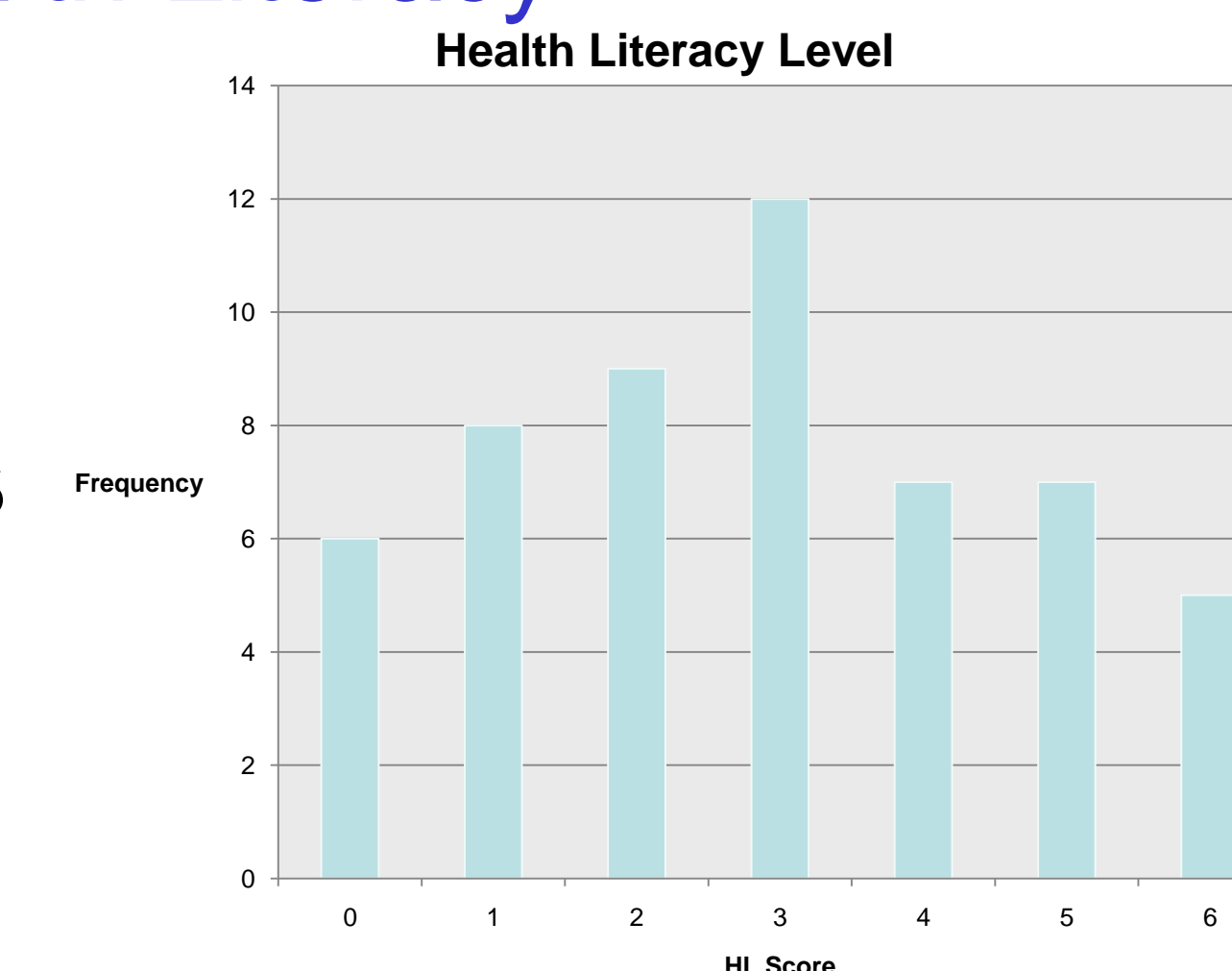
## Results

### Sample Characteristics

- N = 54
- 23 Black
- 19 Latino/Hispanic
- 12 White
- 23 males 31 Females
- Age 16 -66 Mean 48.3
- 20 4<sup>th</sup> grade or less
- 15 Some high school
- 19 Some college

### Health Literacy

Range 0 – 6  
Mean 2.87  
65% 3 or less



Scoring Key  
0-1 suggests limited health literacy  
2-3 indicates possibility of limited health literacy  
4-6 almost always indicates adequate literacy

## Outcomes

	Pre Mean	Post Mean	T Score	Significance
Diabetes Empowerment	23.5	25.8	1.85	.078
Perceived Health	35.8	38.2	1.41	.174

	T Value	Significance
Diabetes Empowerment	1.846	.07
Perceived Health	1.406	.17
HgBA1C	.434	.667
Systolic Blood Pressure	.391	.698
Diastolic Blood Pressure	.573	.570
Weight	1.37	.179
Blood Sugar	.695	.492
Cholesterol	-7.17	.484
Triglycerides	-1.074	.3
LDL	1.23	.240
HDL	-3.95	.699

Variable	Cohen's d	Effect Size
Diabetes Empowerment	.250	Medium
Perceived Health	.312	Medium

## Conclusion

- 65% of participants had limited health literacy
- Medium effect sizes were obtained for Diabetes Empowerment and Perceived Health

## Implications

- Health literacy is quick and easy to assess on initial patient visit
- Record score on EMR to guide patient teaching
- Implement Ask Me 3 program for all patients
- Health literacy needs to be considered as the 6<sup>th</sup> vital sign