Using data to identify disparities (2/2)

Julia E. Iyasere, MD, MBA

Executive Director, Dalio Center for Health Justice, NewYork-Presbyterian

Senior Vice President, Health Justice and Equity, NewYork-Presbyterian

Assistant Professor, Medicine, Columbia University Irving Medical Center

Agenda

- **Introductions**
  - HANYS AHEI team
  - AHEI faculty
- **Our partners**
- **Session 7**
  - Using data to identify disparities (2/2)
- **Upcoming sessions**

HANYS AHEI team

Kathleen Rauch, RN, MSHQS, BSN, CPHQ

Vice President, Quality Advocacy, Research and Innovation and Post-acute and Continuing Care

Christina Miller-Foster, MPA

Senior Director, Quality Advocacy, Research and Innovation

Morgan Black, MPA

Director, AHEI

Maria Baum, MS, RN, CPHQ

Project Manager, Mohawk Valley

Rachael Brust, MBA

Project Manager, North Country

Kira Cramer, MBA

Project Manager, Downstate

HANYS faculty

Julia E. Iyasere, MD, MBA

Executive Director, *Dalio Center for Health Justice, NewYork-Presbyterian*
Senior Vice President, *Health Justice and Equity, NewYork-Presbyterian*
Assistant Professor, *Medicine, Columbia University Irving Medical Center*

Theresa Green, PhD, MBA

Director, *Community Health Policy and Education, Center for Community Health and Prevention, University of Rochester Medical Center*

Our funder and partner

Our funder

Funding from the Mother Cabrini Health Foundation allows HANYS to expand its capacity to provide education, direct support, tools and data to our members in a strategic way. With this learning collaborative, we strive to effect lasting change in health equity at the local level by engaging providers and community stakeholders to address health disparities.

Our partner

DataGen develops custom analytics for participants to help them understand how and where communities are affected by health disparities so they can develop tailored interventions.

Presenter

Julia E. Iyasere, MD, MBA

Executive Director, Dalio Center for Health Justice, NewYork-Presbyterian
Senior Vice President, Health Justice and Equity, NewYork-Presbyterian
Assistant Professor, Medicine, Columbia University Irving Medical Center

"A number of consensus-building organizations and researchers, including the IOM, AHRQ, and previous NQF reports, have advocated for racial/ethnic stratification of quality measures.

Stratification makes the quality of care of the most vulnerable groups plain, highlighting disparities in care between groups where adjustment obscures them.

This helps raise awareness of disparities in care...[and] produces opportunities for providers to develop targeted interventions."

-The Disparities Solutions Center

at Massachusetts General Hospital

Patient-Level Data

Collection

Validation

Standardization

Education

Disaggregation & Evaluation

Internal White Papers

Race and Ethnicity Grouping, Visualization, and Reporting

Measuring Health Equity

- **Principles** of Equity Measurement

- **Selecting Measures** for Disaggregation

- **Measure** Disaggregation

Collection   Validation   Education   Disaggregation & Evaluation

Internal White Papers

Race and Ethnicity Grouping, Visualization, and Reporting

Measuring Health Equity

- **Principles** of Equity Measurement
  - Commitment
  - Level of measurement (e.g., system, service, department, etc.)
  - Transparency

- **Measure Selection**
  - Equity-sensitive
  - Aligned with organizational priorities
  - Impactable & actionable
  - Available

- **Measure** Disaggregation
  - Unadjusted disaggregation
  - Risk-adjustment/associative modeling

| Collection | Validation | Education | Disaggregation & Evaluation |

Measure Selection

What can we learn about potential disparities from this measure?

Data Overview

What does the quality metric data look like for the entire cohort?

Disparities Identification

Is there a difference in the quality metric based on patient demographics?

Evaluation of Contributing Factors

If so, are there additional factors that may be impacting the quality metric?

Risk-Adjustment

If so, when the risk factors are controlled for, do disparities remain in risk-adjusted quality outcomes?

Collection | Validation | Education | Disaggregation & Evaluation

Access Assessment

HCAHPS

Enterprise Quality Measures

Other Equity Measurement Projects

NewYork-Presbyterian
2022 Health Equity Report

NewYork-Presbyterian
2023 Health Equity Report

Collection   Validation   Education   Standardization
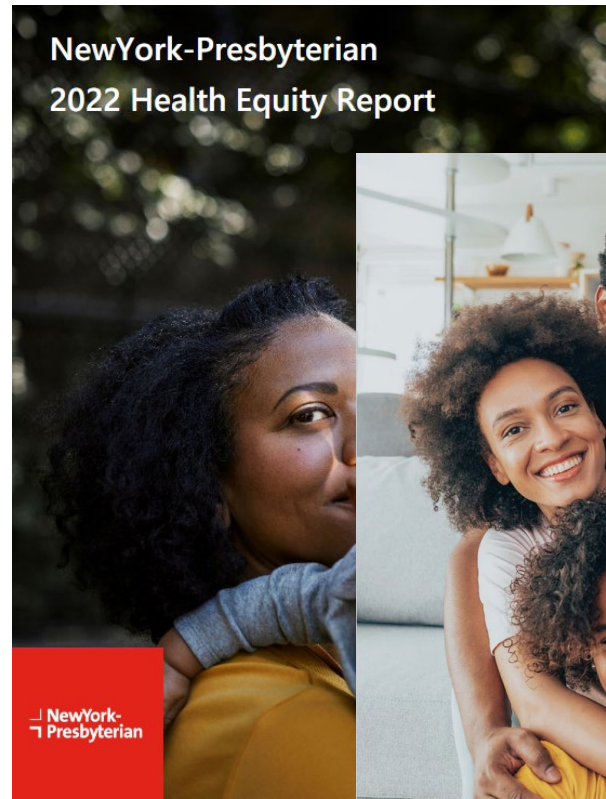
Access Assessment

HCAHPS

Enterprise Quality Measures

Other Equity Measurement Projects

Demographic Review: Race and Ethnicity

We evaluated the racial and ethnic distribution of our service area (using 2020 census data) compared to the racial and ethnic distribution of NewYork-Presbyterian patients with an inpatient discharge or emergency department visit (using patient self-reported race and ethnicity). For example, from July 1, 2022 to June 30, 2023, 27% of patients with an inpatient discharge self-identify as Latino compared to 29% of people living in our service area who identify as Latino, according to the 2020 census (Figure 2).
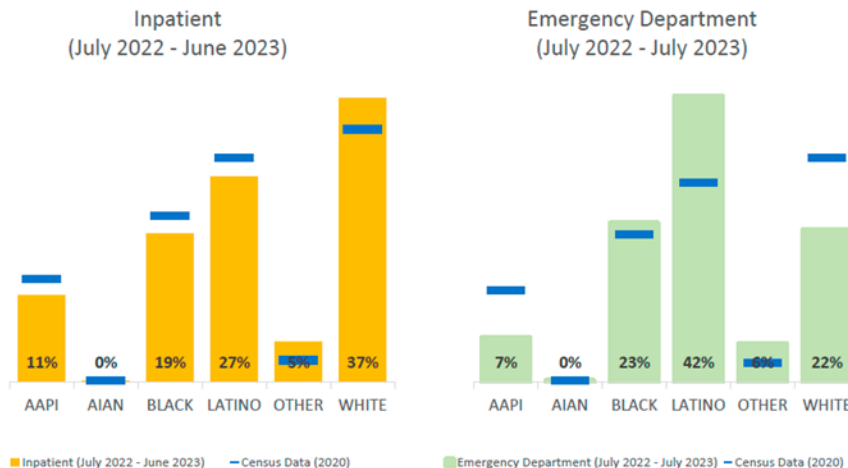

Inpatient (July 2022 - June 2023)

AAPI	AIAN	BLACK	LATINO	OTHER	WHITE
11%	0%	19%	27%	5%	37%

Emergency Department (July 2022 - July 2023)

AAPI	AIAN	BLACK	LATINO	OTHER	WHITE
7%	0%	23%	42%	6%	22%

■ Inpatient (July 2022 - June 2023) — Census Data (2020)
■ Emergency Department (July 2022 - July 2023) — Census Data (2020)

Figure 2: 2020 Census-based racial and ethnic distribution of population in the five-county service area versus racial and ethnic distribution of all patients with NewYork-Presbyterian inpatient discharges

Figure 3: 2020 Census-based racial and ethnic distribution of population in the five-county service area versus racial and ethnic distribution of all patients with NewYork-Presbyterian emergency department visits

In all demographic charts (Figures 2-5), the blue lines indicate the race and ethnicity distribution determined by 2020 US Census data, while the bars indicate the self-identified race and ethnicity distribution of NewYork-Presbyterian patients.

AAPI: Non-Latino Asian American Pacific Islander; AIAN: Non-Latino Native American and Alaska Natives; BLACK: Non-Latino Black or African American; LATINO: Latino/a/x or Hispanic; WHITE: Non-Latino White; OTHER: Other not described.

14

Collection   Validation   Education   Standardization

Access Assessment

HCAHPS

Enterprise Quality Measures

Other Equity Measurement Projects

All Outpatient (July 2022 - June 2023)

	AAPI	AIAN	BLACK	LATINO	OTHER	WHITE
All Outpatient	8%	0%	19%	26%	9%	38%

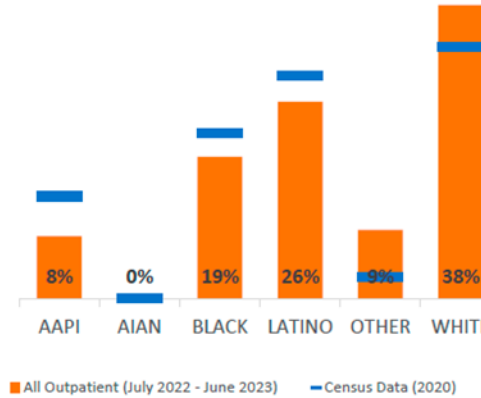Legend: All Outpatient (July 2022 - June 2023); Census Data (2020)

Figure 4: 2020 Census-based racial and ethnic distribution of population in our service area versus racial and ethnic distribution of patients that come to NewYork-Presbyterian outpatient locations

ACN Service Area (July 2022 - June 2023)

	AAPI	AIAN	BLACK	LATINO	OTHER	WHITE
ACN	5%	0%	23%	47%	8%	16%

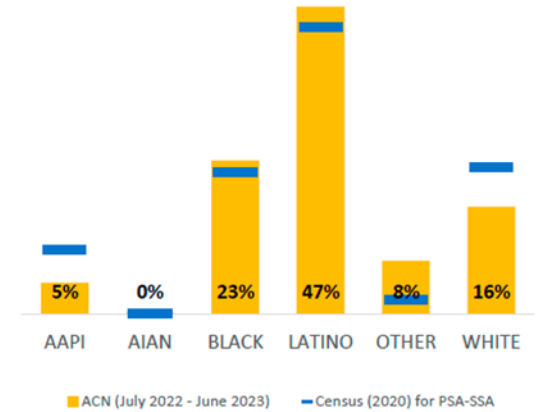Legend: ACN (July 2022 - June 2023); Census (2020) for PSA-SSA

Figure 5: 2020 Census-based racial and ethnic distribution of population in the ACN PSA and SSA versus racial and ethnic distribution of patients that come to ACN locations

Collection | Validation | Education | Standardization

Access Assessment

HCAHPS

Enterprise Quality Measures
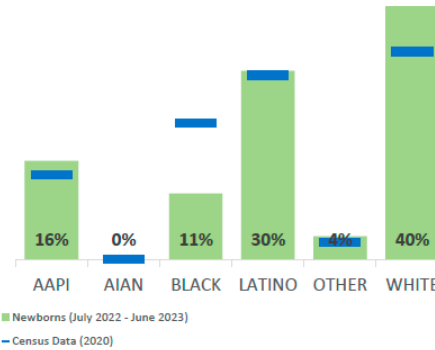
Other Equity Measurement Projects

Figure 7: 2020 Census-based racial and ethnic distribution of population in our service area versus racial and ethnic distribution of newborns born at NewYork-Presbyterian locations with NewYork-Presbyterian inpatient discharges
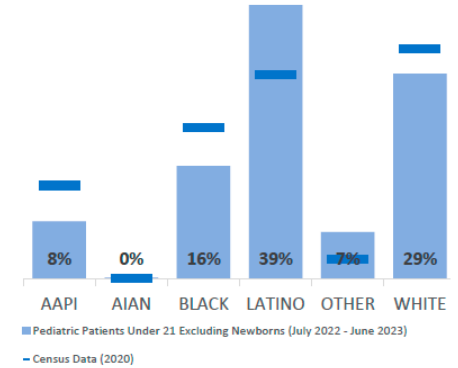
Figure 8: 2020 Census-based racial and ethnic distribution of population in our service area versus racial and ethnic distribution of pediatric patients under 21 (excluding newborns) with NewYork-Presbyterian inpatient discharges

Collection   Validation   Education   Standardization

Access Assessment

HCAHPS

Enterprise Quality Measures

Other Equity Measurement Projects

Discharges and Visits (July 2022-June 2023)
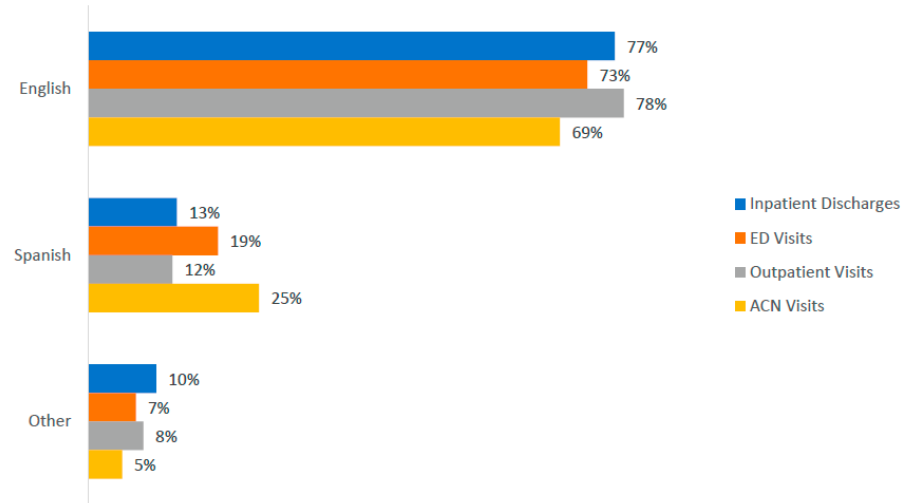

Figure 6: Language distribution of all patients with inpatient discharges, emergency department visits, outpatient visits, and ACN visits at NewYork-Presbyterian. "Other" includes any language besides English or Spanish. Fewer than 1% of patients have a "declined" value for language and are excluded from this analysis.

Collection   Validation   Education   Standardization

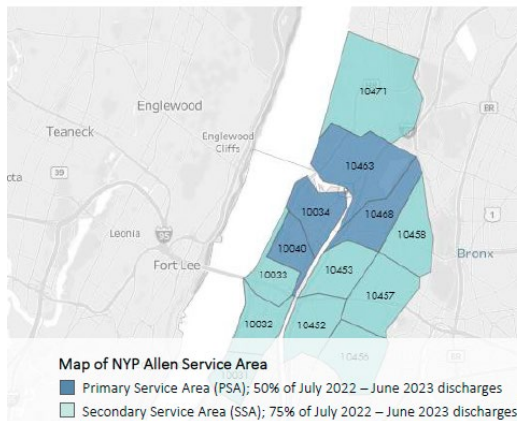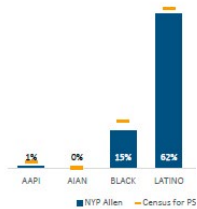## Access Assessment

HCAHPS

Enterprise Quality Measures

Other Equity Measurement Projects

01 Campus-specific Data

NewYork-Presbyterian Allen Hospital: Racial and ethnic distribution of population in the NYP Allen service area versus racial and ethnic distribution of all inpatients from July 2022 – June 2023
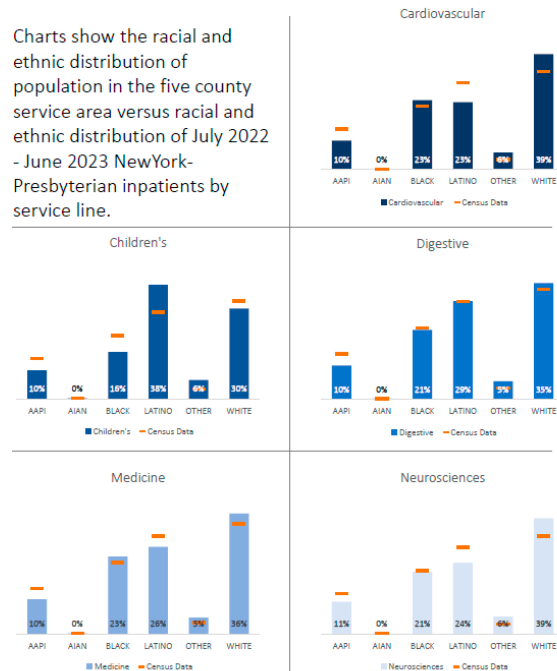
Blue bars represent the self-reported race/ethnicity distribution of all inpatients at NYP Allen

Orange lines represent the weighted-average race/ethnicity distribution from the 2020 US Census for people living in NYP Allen's primary and secondary service area, illustrated in the map.

Map of NYP Allen Service Area
- Primary Service Area (PSA); 50% of July 2022 – June 2023 discharges
- Secondary Service Area (SSA); 75% of July 2022 – June 2023 discharges

02 Service Line-specific Data

Charts show the racial and ethnic distribution of population in the five county service area versus racial and ethnic distribution of July 2022 - June 2023 NewYork-Presbyterian inpatients by service line.
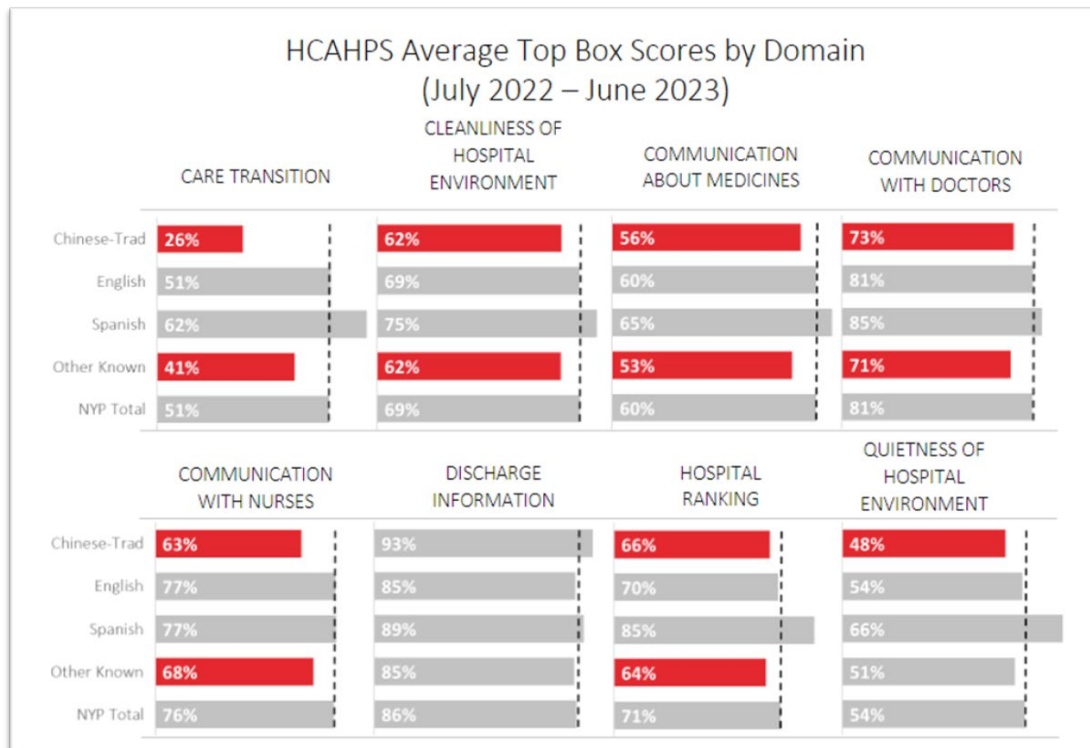
Collection   Validation   Education   Standardization

Access Assessment

HCAHPS

Enterprise Quality Measures

Other Equity Measurement Projects

HCAHPS Average Top Box Scores by Domain (July 2022 – June 2023)

	CARE TRANSITION	CLEANLINESS OF HOSPITAL ENVIRONMENT	COMMUNICATION ABOUT MEDICINES	COMMUNICATION WITH DOCTORS
Chinese-Trad	26%	62%	56%	73%
English	51%	69%	60%	81%
Spanish	62%	75%	65%	85%
Other Known	41%	62%	53%	71%
NYP Total	51%	69%	60%	81%

	COMMUNICATION WITH NURSES	DISCHARGE INFORMATION	HOSPITAL RANKING	QUIETNESS OF HOSPITAL ENVIRONMENT
Chinese-Trad	63%	93%	66%	48%
English	77%	85%	70%	54%
Spanish	77%	89%	85%	66%
Other Known	68%	85%	64%	51%
NYP Total	76%	86%	71%	54%

Access Assessment

HCAHPS

Enterprise Quality Measures

Other Equity Measurement Projects

☑ Mortality

☑ Readmissions

☑ DVT/PE

☑ Sepsis Bundle Use

☑ Bar Code Medication Administration

☑ Discharge to Home

Collection   Validation   Education   Standardization
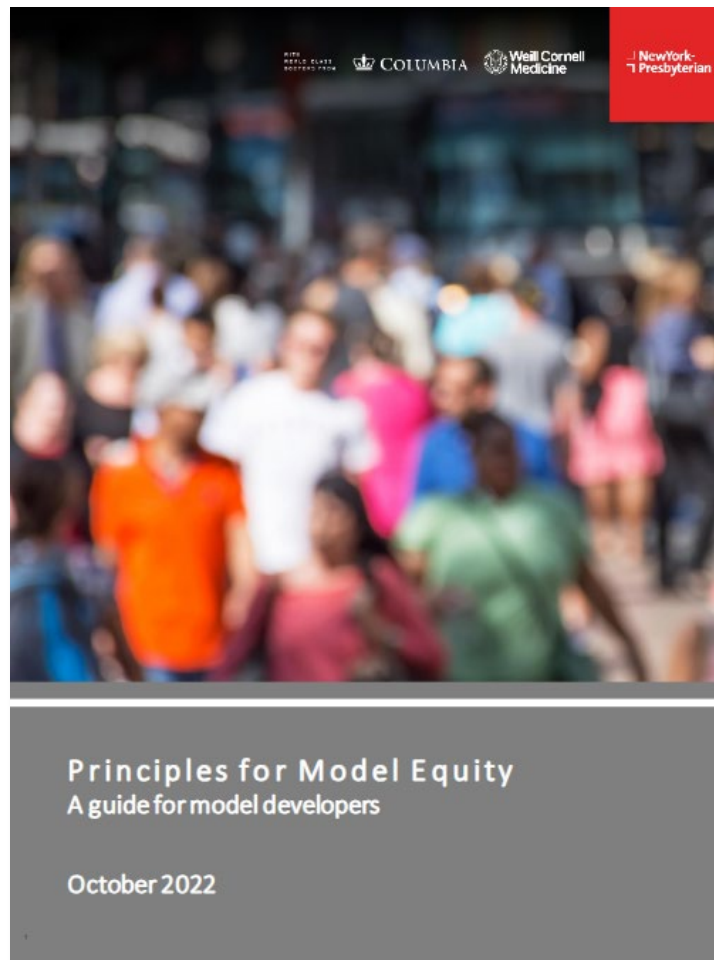
Access Assessment

HCAHPS

Enterprise Quality Measures

Other Equity Measurement Projects

☑ Transplant

☑ ED Length of Stay

☑ Colorectal Cancer Screening

☑ Service Line Volume

☑ Ambulatory Redesign

21

| Collection | Validation | Education | Standardization |

Algorithmic Bias

Bias and Fairness
Assessment Process

NYC CERCA

Principles for Model Equity
A guide for model developers

October 2022

NewYork-Presbyterian

Bias and Fairness Assessment Process

NYC CERCA

NYC Coalition to End Racism in Clinical Algorithms (CERCA)

Estimated Glomerular Filtration Rate Equations (Kidney Function) ☑	Vaginal Birth After Cesarean Section ☑	Pulmonary Function Testing ☑

NewYork-Presbyterian

Thank you!

Questions?

Upcoming sessions

Tuesday, May 21 | 11 a.m. to noon.

Community partnerships

Learn about key factors in building hospital-community partnerships.

The final session of the series will be next Tuesday from 11 a.m. to noon:

- May 28 | Patient and family engagement

Register here.

Questions?

Morgan Black, MPA

mblack@hanys.org

AHEI Team

ahei@hanys.org