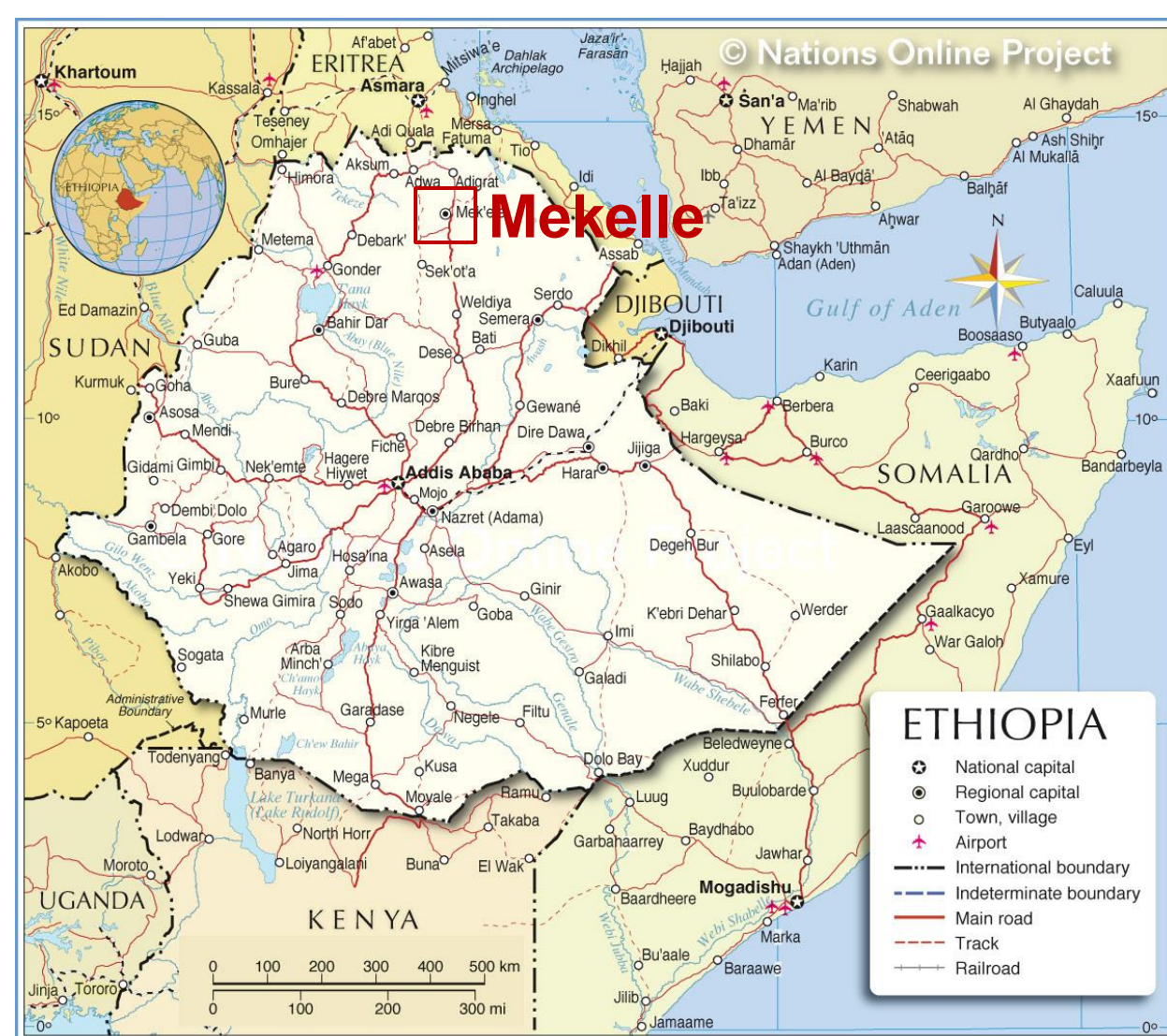


An assessment of Internal Medicine residency curricula development needs conducted among trainees at Ayder Referral Hospital in Mekelle, Ethiopia

Wei-Chu Lai¹, Qi Liu¹, Samuel Berhane², Eyoel Berhan², Basia Najarro¹, David Clifford³, Mengesha Teshome³, Rupa Patel¹

¹Washington University in St. Louis, Internal Medicine, St. Louis, MO (United States), ²Ayder Referral Hospital, College of Health Sciences, Mekelle University, Mekelle (Ethiopia), ³Washington University in St. Louis, Neurology, St. Louis, MO (United States)

BACKGROUND



Ayder Referral Hospital (ARH) was established in 2008 and is the most medically advanced medical center in the northern regions of Ethiopia. Located in Mekelle, it is also the second-largest hospital in the nation with a capacity of 500 inpatient beds. The hospital has a catchment area comprising of 8 million individuals, with over 100,000 patient visits each year¹. ARH established an internal medicine (IM) residency training program in 2012 and currently serves as the teaching hospital for the College of Health Sciences of Mekelle University. It has been a new academic partner of the Internal Medicine Department at Washington University in St. Louis (WUSTL) since February of 2013. In order to further the collaborative partnership between ARH and WUSTL through exchanges in academic medical training, we sought to understand the IM curricula development needs at ARH from the viewpoint of current internal medicine trainees.

OBJECTIVES

- 1) To understand IM trainee-reported incidence of acute and chronic diseases in IM at ARH
- 2) To understand self-reported strengths and weaknesses in medical knowledge (MK) and clinical skills (CS) among trainees at ARH

MATERIALS AND METHODS

- Twenty-four IM trainees at ARH were interviewed individually in English. Oral consent was obtained.
- Trainees were asked regarding:
 - Demographics
 - Most common diseases encountered
 - Confidence in varying areas of MK
 - Confidence in performing different CS
 - Needs for curricula development in both areas of MK and CS
- MK was defined as basic anatomy, physiology and pathophysiology in the individual IM specialties.
- CS included history taking, physical examinations, communication skills, procedural skills, creating assessments and forming individualized patient treatment plans.
- Confidence was measured on a 5-point Likert scale and was categorized into low or high confidence.
- Descriptive statistics and qualitative analyses were performed.

RESULTS

Table 1: Demographics of IM Trainees Participating in the Survey

	Average Age (Years)	No. of Males	No. of Females
Interns (1 st year IM trainee)	24	10	5
Residents (2 nd year IM trainee)	26.1	7	2
Total	24.8	17	7

Table 2: Most common acute disease presentations encountered by IM trainees

Disease	% of Respondents
Acute MI	41.67
DKA	37.50
Pneumonia	37.50
Acute febrile illness	33.33
Stroke	25.00
Malaria	20.83
Asthma	12.50
Asthma Exacerbation	12.50
Peptic ulcer disease	12.50
CHF exacerbation	8.33
Thromboembolic disease	8.33
Urinary tract infection	8.33
Anemia	4.17
Dehydration	4.17
Diarrhea	4.17
Gastroenteritis	4.17
Guillian-Barre Syndrome	4.17
Intestinal parasites	4.17
Septic shock	4.17
Supraventricular tachycardia	4.17
Tuberculosis	4.17
Uremic encephalopathy	4.17

Table 3: Most common chronic diseases encountered by IM trainees

Disease	% of Respondents
HIV	75.00
Diabetes	54.17
Tuberculosis	50.00
Chronic kidney disease	29.17
Visceral leishmaniasis	25.00
Chronic liver disease	20.83
Congestive heart failure	20.83
Rheumatic heart disease	20.83
Hypertension	16.67
COPD	4.17
Malnutrition	4.17
Pancytopenia	4.17

Figure 1: Self-reported medical knowledge by subject matter on a 5-point Likert scale

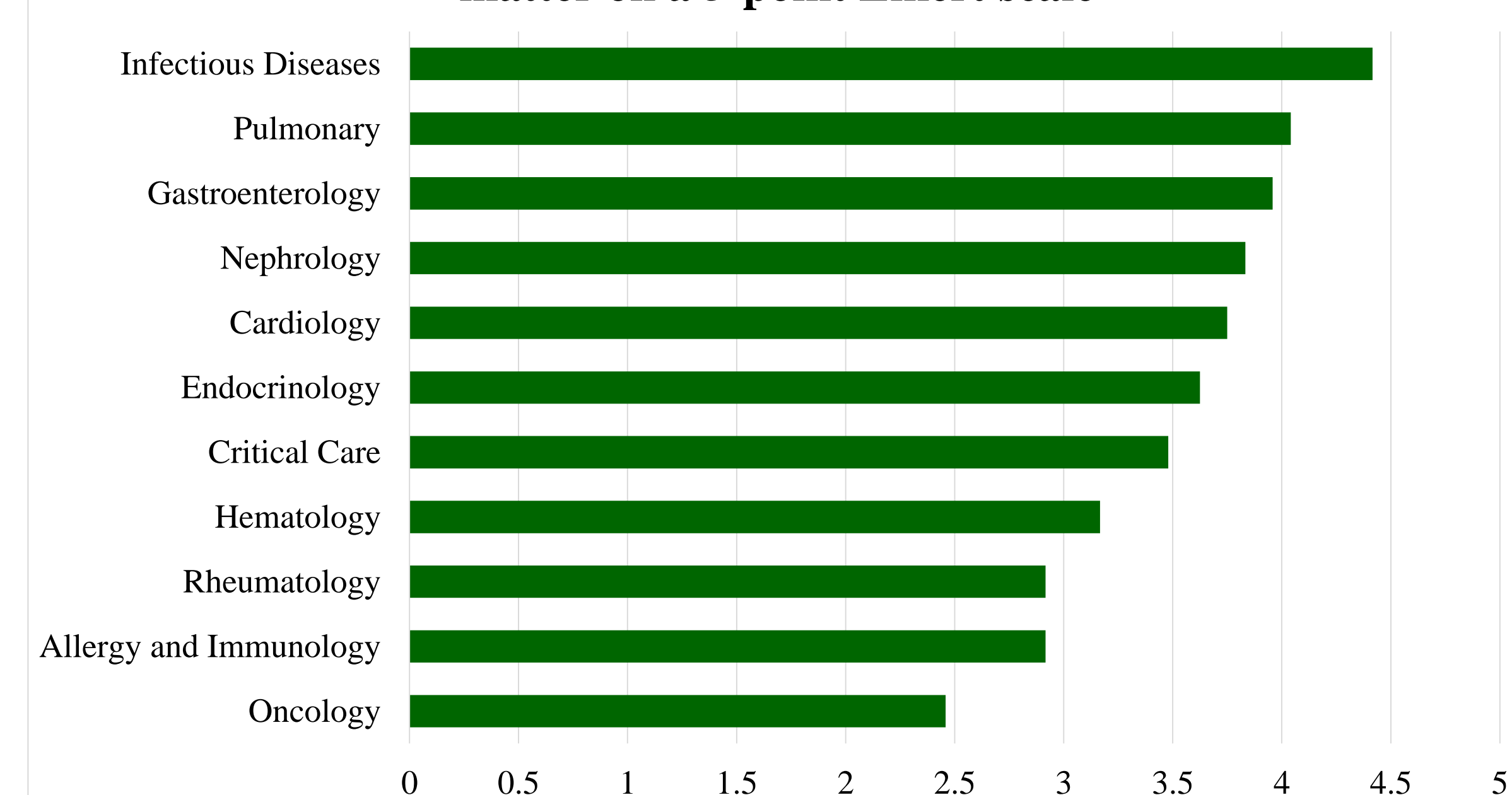


Figure 2: Areas of medical knowledge that IM trainees want to improve

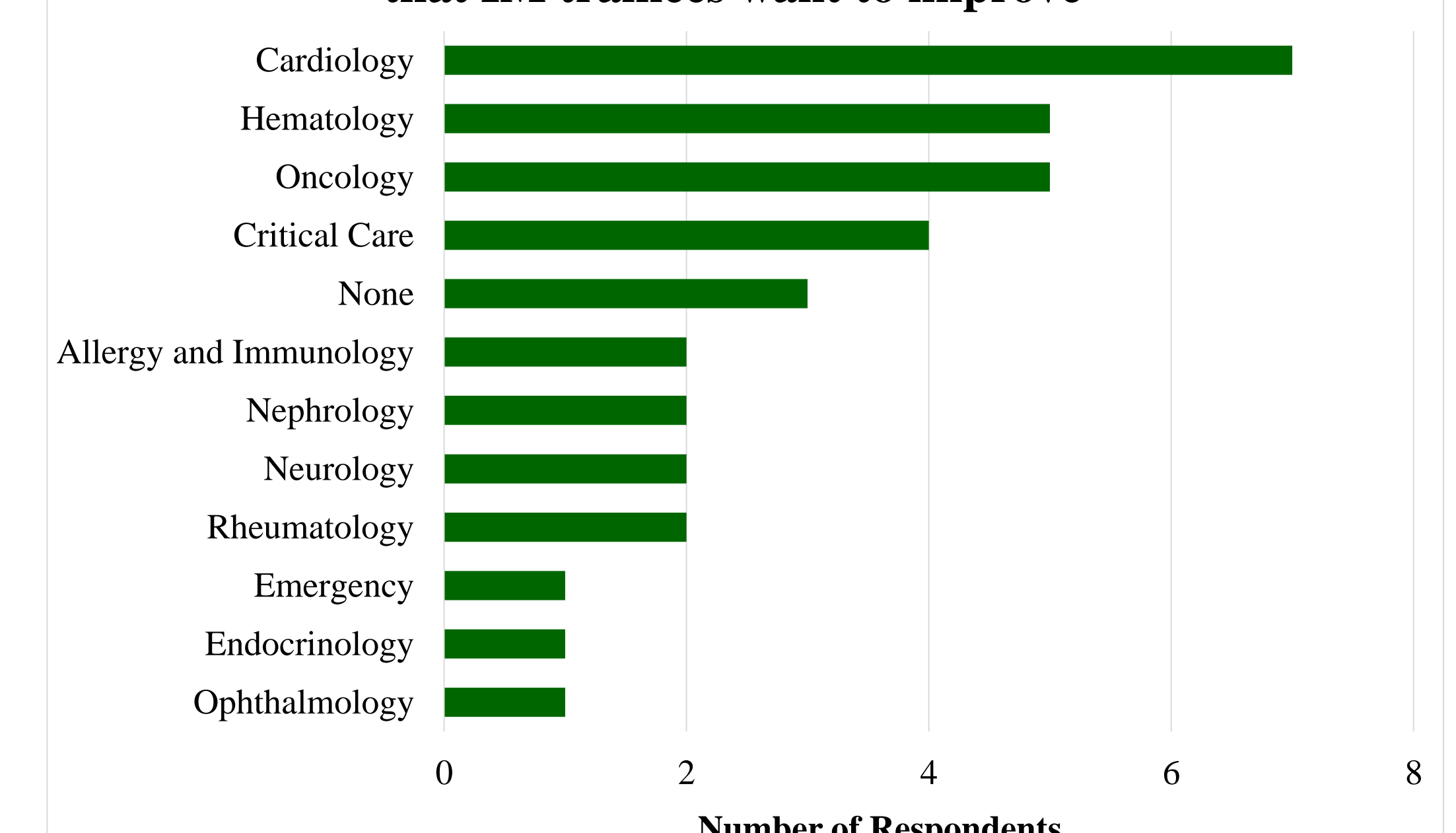


Figure 3: Self-reported proficiency in clinical skills on a 5-point Likert scale

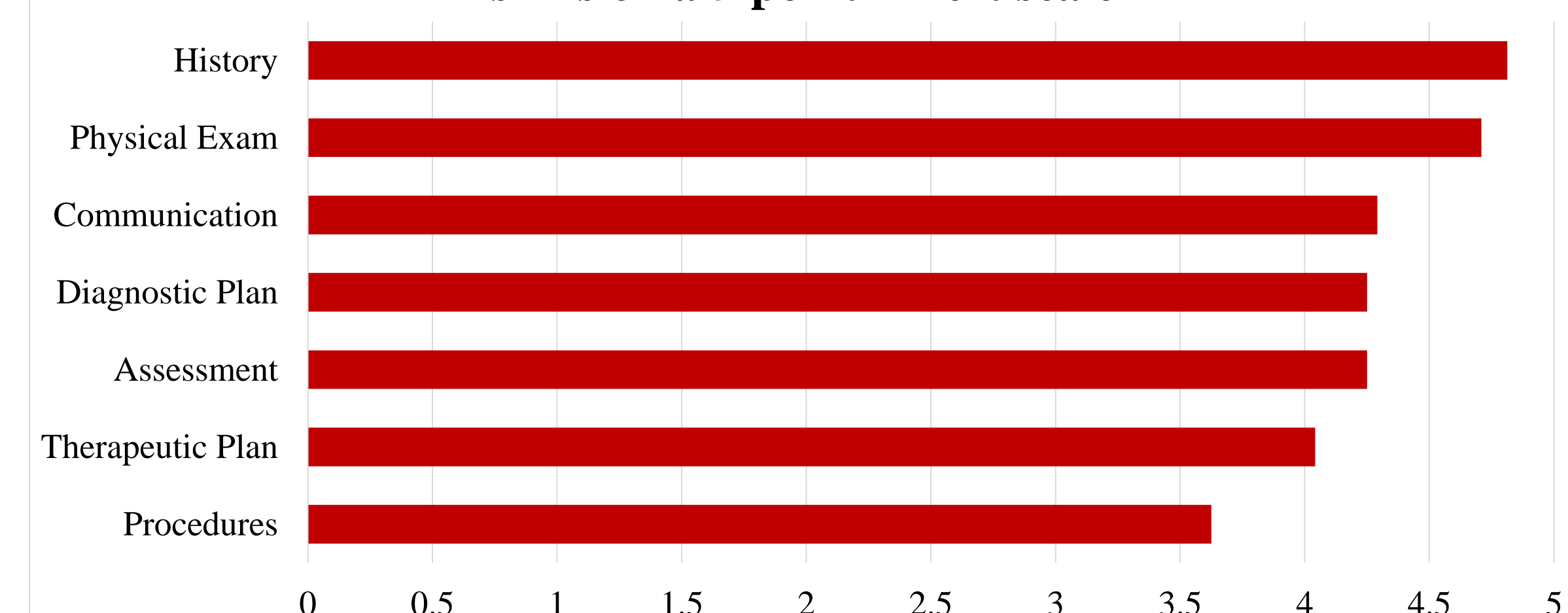
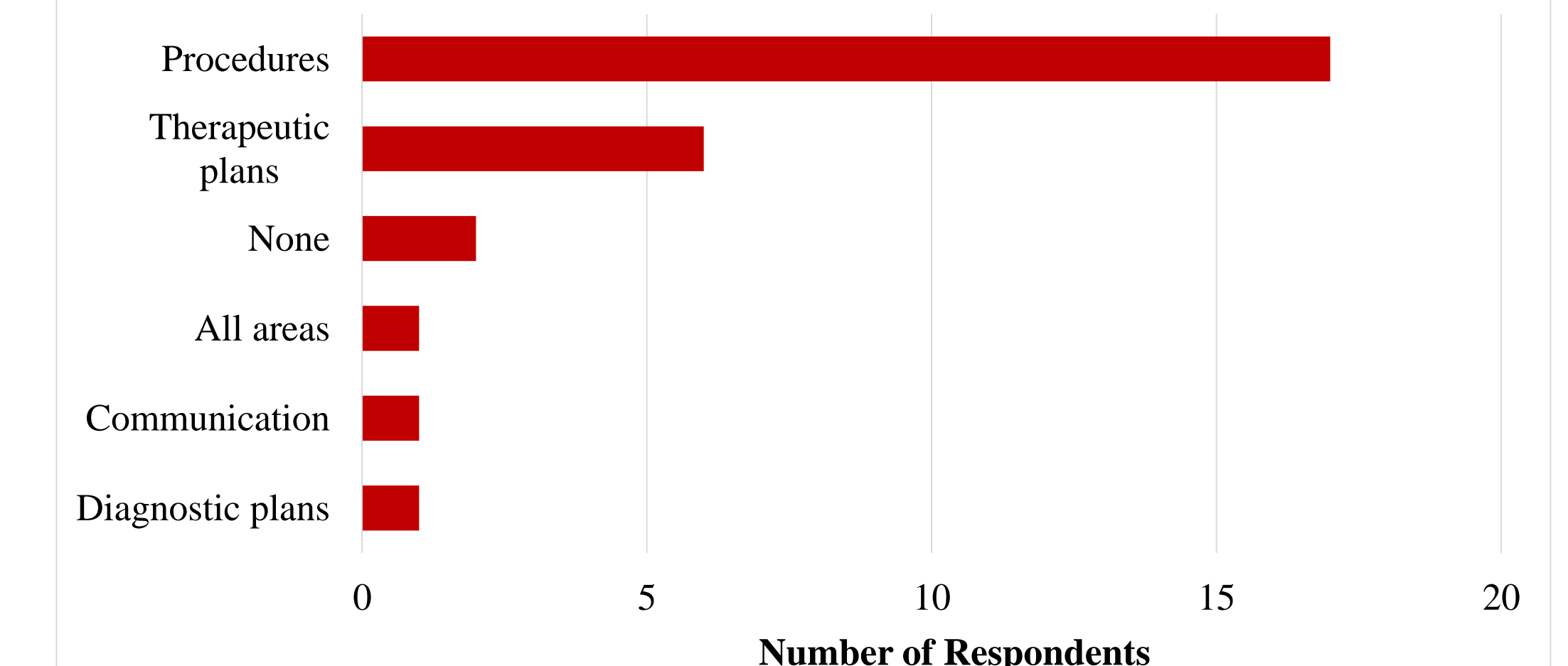


Figure 4: Clinical skills that IM trainees want to improve



CONCLUSIONS

- 1) Future internal medicine curricula development at ARH should emphasize the following:
 - Commonly encountered diseases
 - Hematology, oncology and rheumatology in the area of medical knowledge
 - Procedural skills and developing patient treatment plans in the area of clinical skills
- 2) This assessment can potentially guide curricula development for other new global health academic partnerships

REFERENCES

1. <http://www.mu.edu.et/index.php/the-ayder-referral-hospital>
2. <http://www.who.int/countries/eth/en/>