



Addressing Healthcare Needs in Apopka, Florida Through Interprofessional Service Learning

UNIVERSITY OF CENTRAL FLORIDA
College of Medicine

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Introduction

This year, UCF COM MedPACT expanded its mission of providing global health locally to the underserved community in Apopka, Florida. Faculty and students from the UF College of Pharmacy, UCF Colleges of Medicine, Nursing, Social Work, and Physical Therapy, and volunteer physicians from the Orlando community provided medical service to a culturally, ethnically, and linguistically diverse population. The breadth of services provided encompassed internal medicine, dermatology, occupational health, obstetrics and gynecology, ophthalmology, pediatrics, physical therapy, pharmacy, and social work. This interdisciplinary event allowed students to gain mentorship and first-hand exposure to clinical care in underserved populations as part of their professional development.



Global Health to Local Health

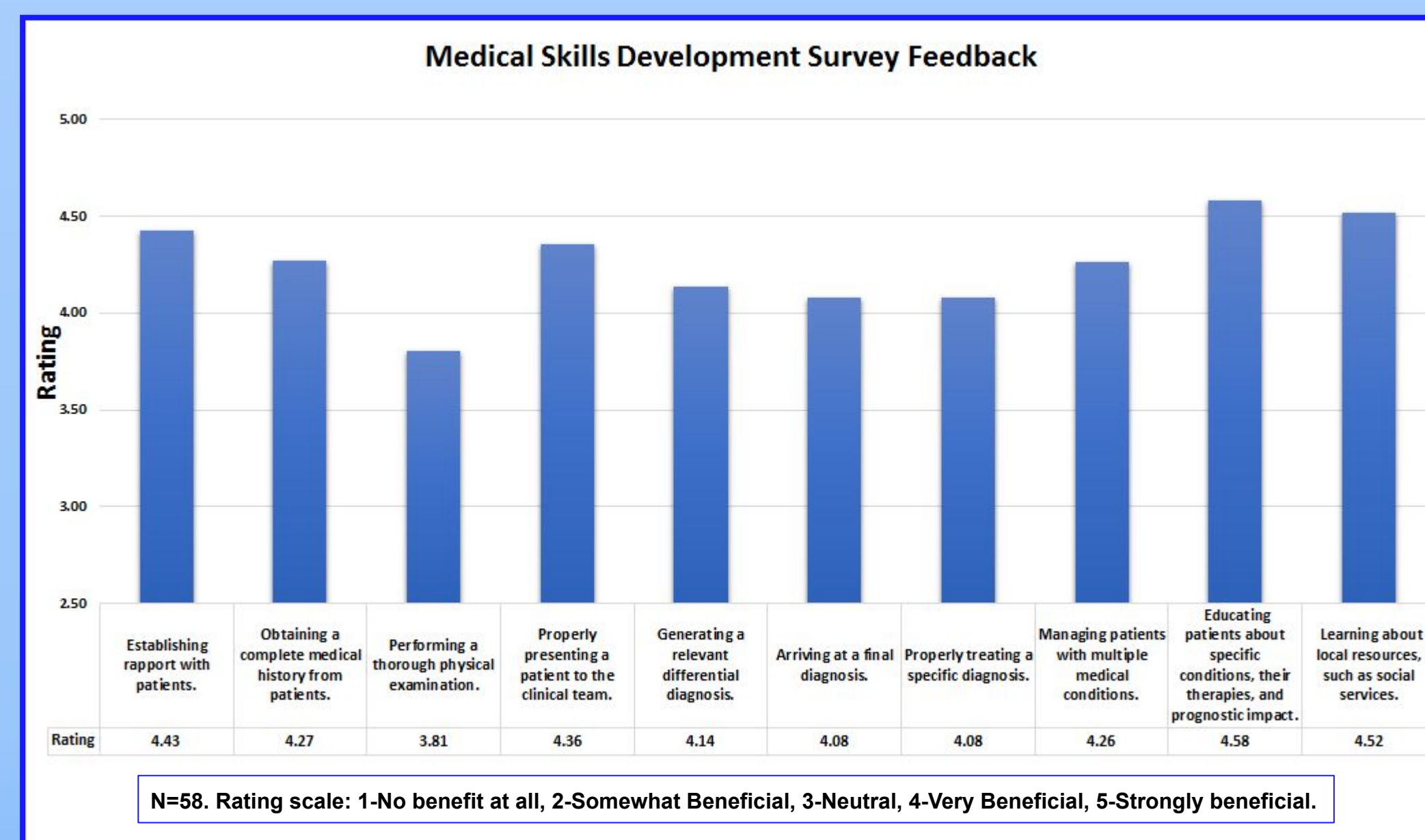
As a global health interest group, our mission encompasses global health service locally and abroad. Since 2013, we have established an annual summer interprofessional medical service trip to the Dominican Republic (DR). However, previous research demonstrated a strong healthcare need locally and led us to Apopka, where there is a large population of immigrant farmworkers without health insurance or regular healthcare. In comparing service trips in the DR and in Apopka, the barriers to healthcare, socioeconomic challenges, medical needs, culture, and languages of the populations were strikingly similar. Additionally, providing healthcare locally will allow for a continuous network of care and utilization of social programs.

	Dominican Republic	Apopka
Cost	\$2733	\$947
IPE students who participated	40	120
Patients served per day	144	92
Common patient complaints	Bacterial/Fungal/Parasitic infections, Diabetes, Hypertension, Vitamin deficiencies	Diabetes, Headaches, Hypertension, Extremity weakness, Skin rash, Vitamin deficiencies

Top 15 Medications Distributed in Apopka vs. Dominican Republic	
Apopka, 2016	Dominican Republic, 2012
1. Ibuprofen 200mg	1. Lisinopril 10 mg
2. Prenatal Vitamin	2. Acetaminophen 500 mg
3. Acetaminophen 500mg	3. Ca Carbonate- antacid, USP 1,000mg
4. Meloxicam 15mg	4. Ibuprofen 200 mg
5. Lasix 20 mg	5. Adult Multivitamin (Adult, Women's, Men's, Gummies)
6. Children's Vitamin	6. Prenatal Vitamin (and Gummies)
7. Metformin 500mg	7. Lorazepam 10mg
8. Lubricant Eye Drops, single use	8. Cefixime 100 mg
9. Lorazepam 10mg	9. Naproxen 250 mg
10. Naproxen 250mg	10. Aspirin, 81 mg
11. Excedrin	11. Omeprazole, 20.6 mg
12. Vitamin D3	12. Famotidine, 20 mg
13. Women's Multivitamin	13. Metformin, 850 mg
14. Iron 55mg	14. Doxycycline 100 mg
15. Doxycycline 100mg	15. Atenolol, 100 mg

Development of Medical Skills

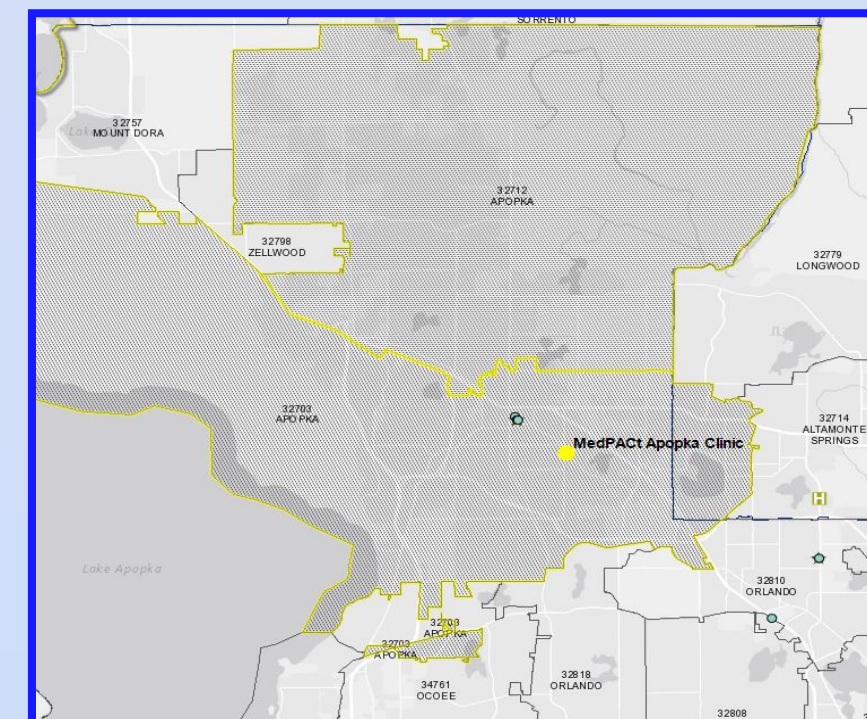
One of the most exciting aspects of this service learning project is the opportunity for professional health students to gain medical knowledge and develop clinical skills while addressing healthcare needs in Apopka.



Impact on Our Local Community

Apopka Demographics

- Total Pop.: 90,983
- Low-Income Pop.: 38.47%
- Low-Income not served by Health Centers: 27.24%
- Uninsured not served by Health Centers: 12.64%
- Non-white: 31.09%
 - Hispanic: 26.24%
 - Black: 16.89%



Map and Apopka demographics by <http://www.udsmapper.org/mapESA.cfm>

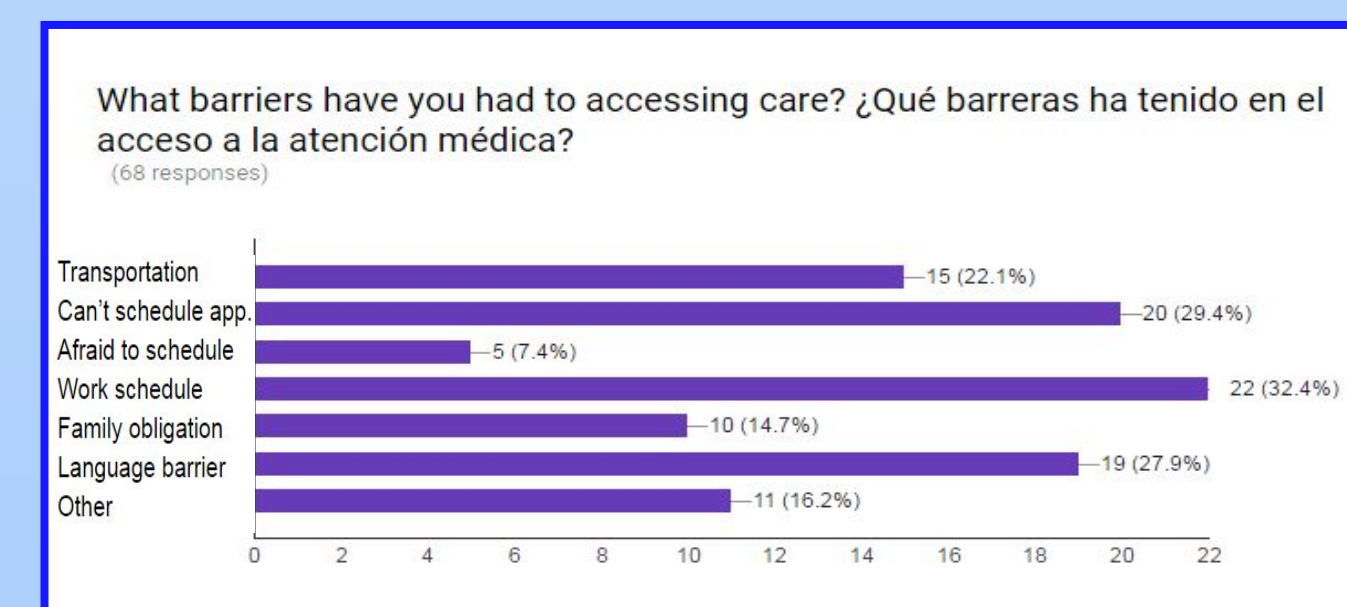
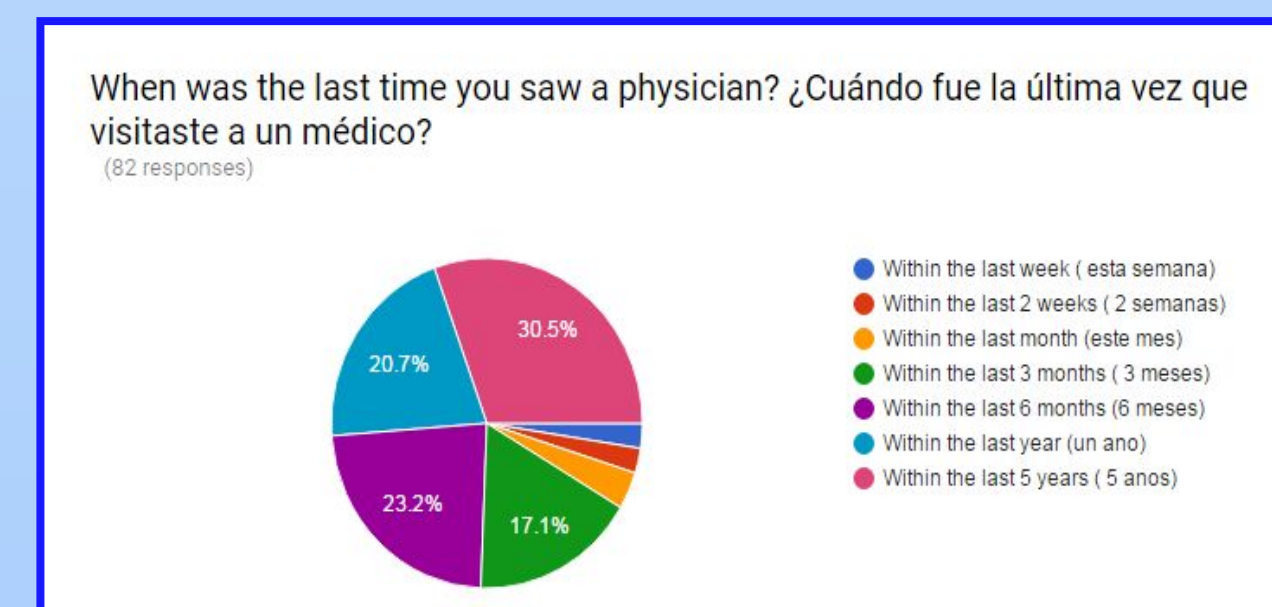
Patients Served: 183

- Adult: 79%
 - Male (43%)
 - Female (57%)
- Pediatric: 21%
 - Male (38%)
 - Female (63%)

Spectrum of Care: A variety of medical issues were addressed, including vitamin deficiencies, extremity weakness, skin rash, ear pain, gynecological concerns, diabetes, headaches, and hypertension. Students were also exposed to behavioral and psychosocial issues including domestic abuse and safe sex practices.

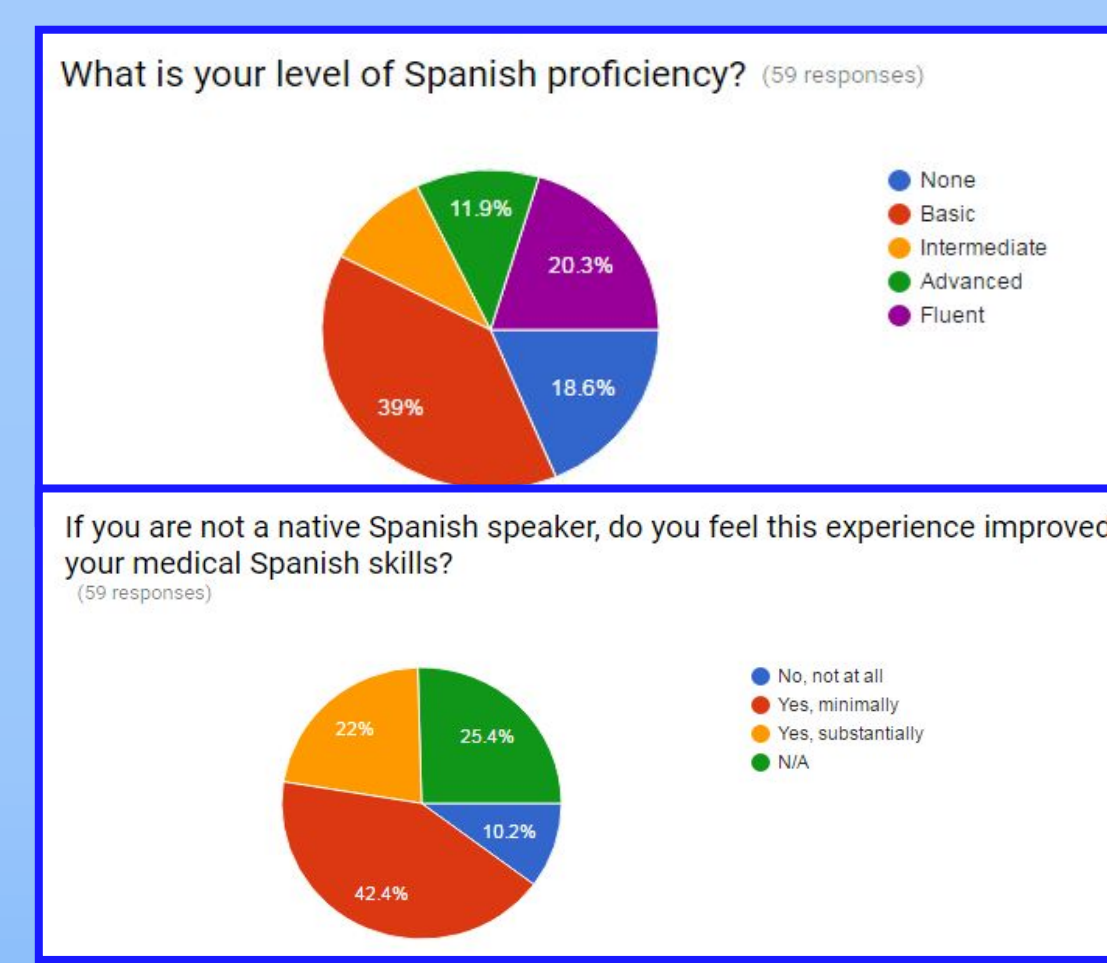


Needs Assessment: To understand the barriers to healthcare access in the Apopka community, patients were provided a survey that assessed their healthcare status.

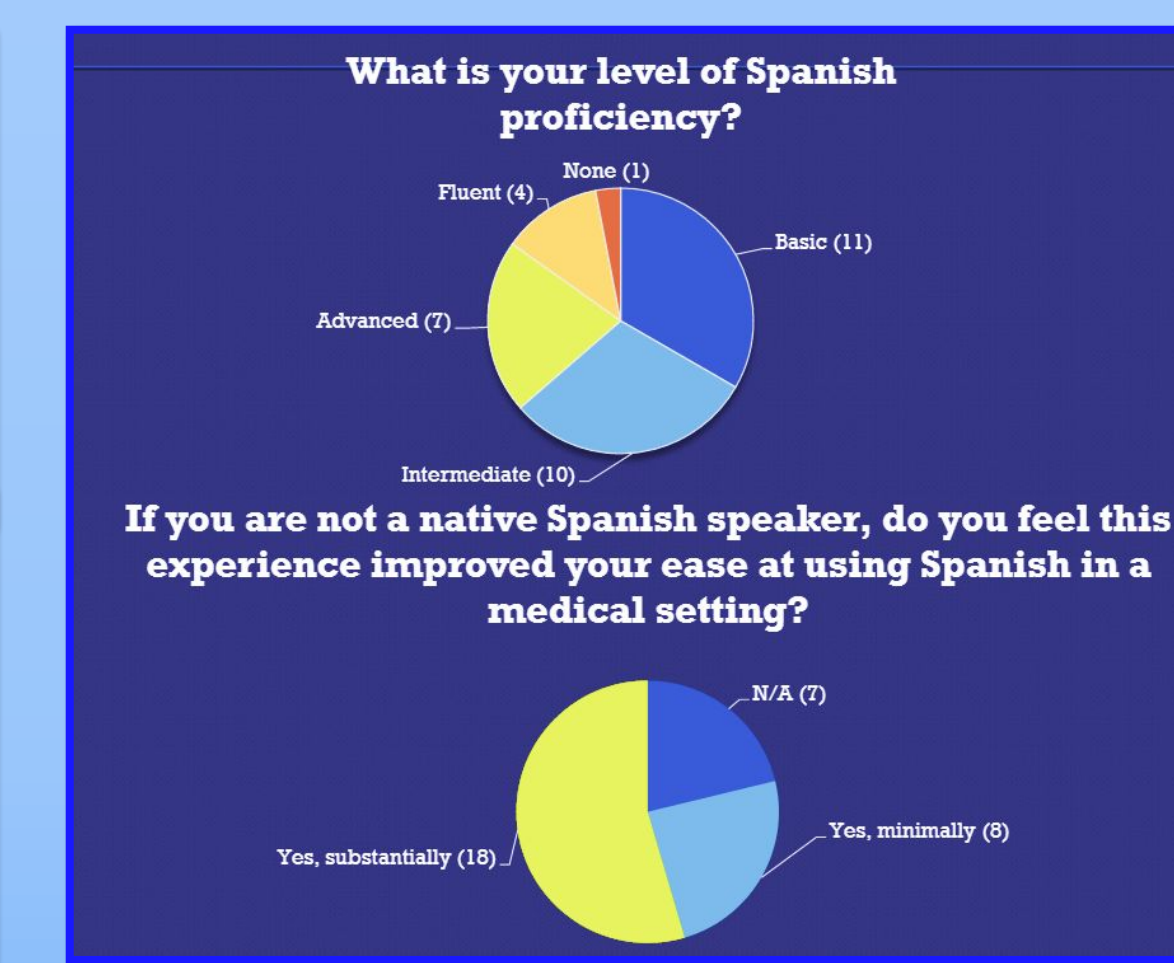


Practice with Medical Spanish

Students are provided with the opportunity to improve their medical Spanish proficiency through a student-organized curriculum complemented by a trained medical translator. Participation in the clinic enhances students' medical Spanish proficiency. Spanish Fluency: (22) Basic, (6) Intermediate, (16) Advanced/Fluent. Other languages: Creole.



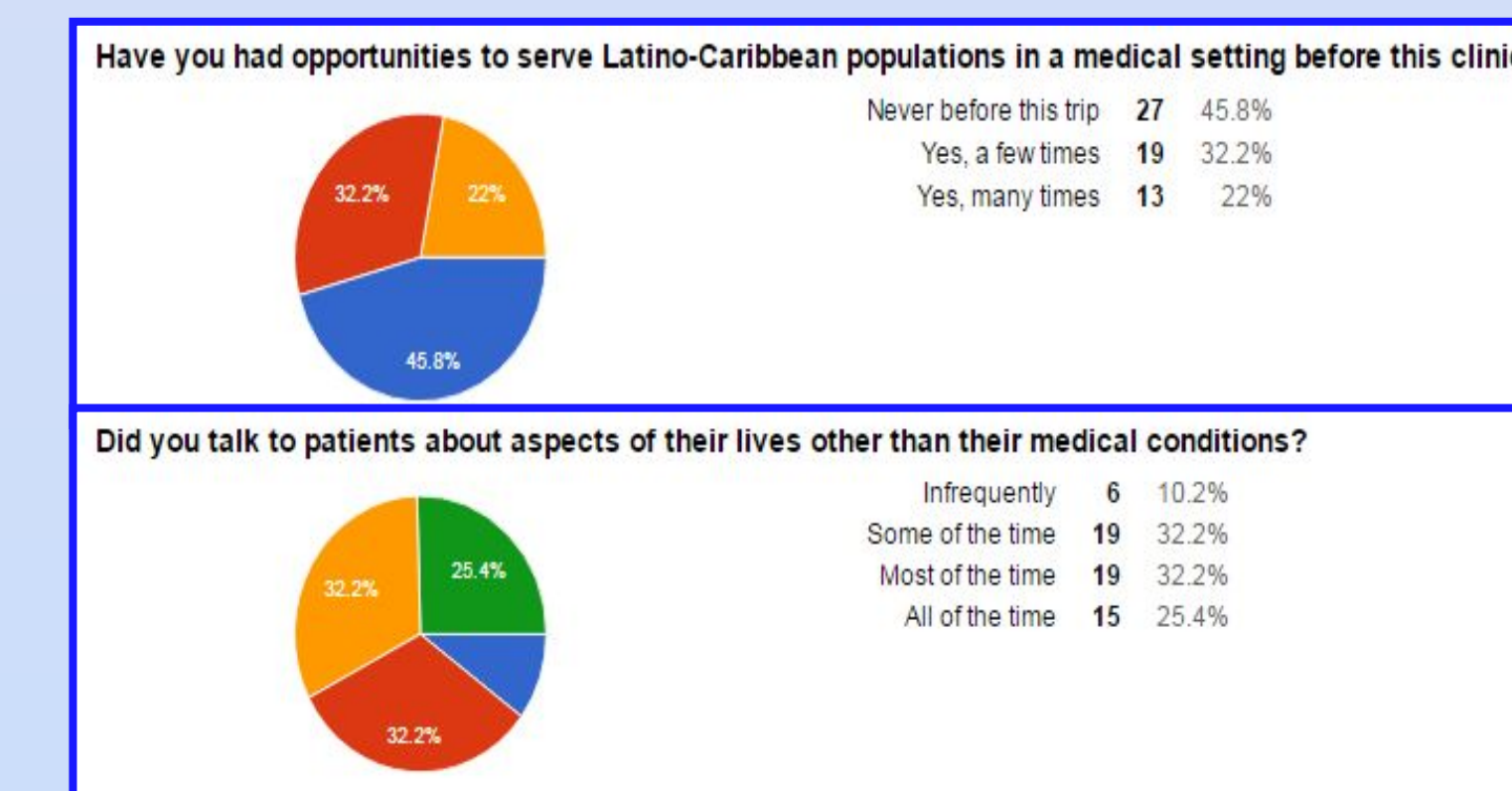
Apopka, 2016



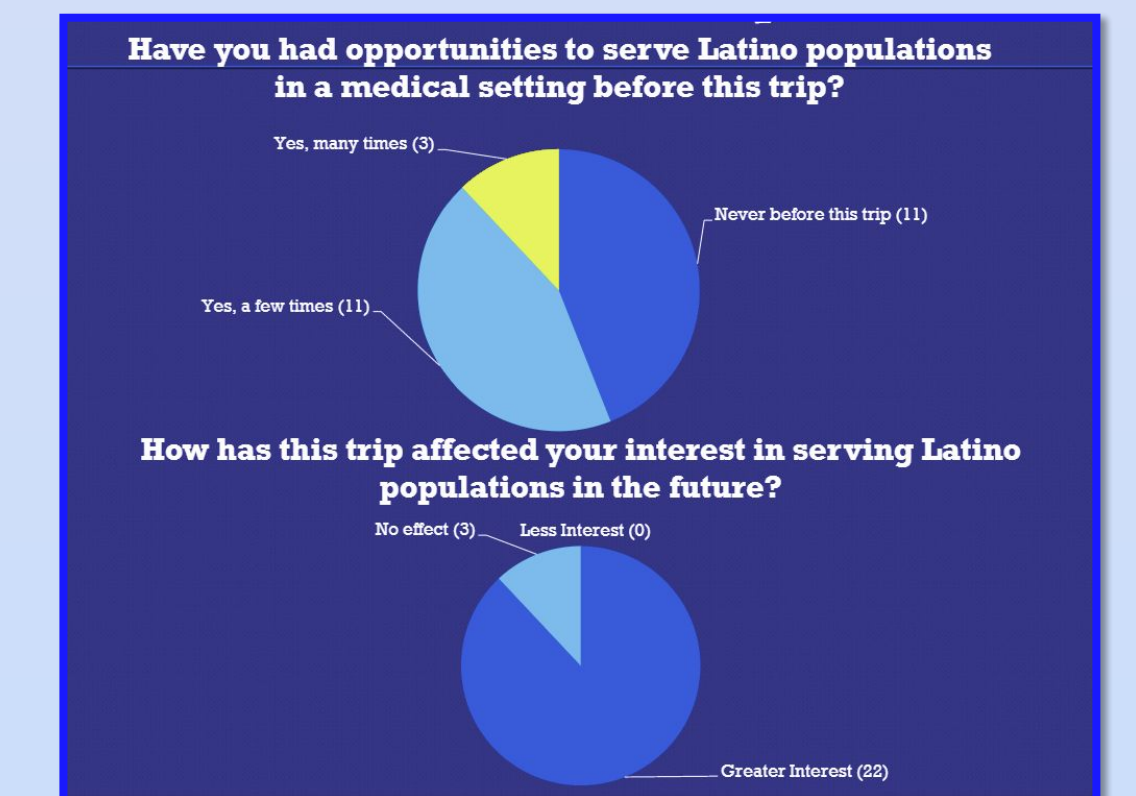
Dominican Republic, 2015

Cultural Education Experience

An integral part of our professional development is cultural awareness for the populations we serve. Our exposure to a culturally and linguistically diverse community that makes up Apopka allows us to better manage and approach diverse patient populations in our local health systems.



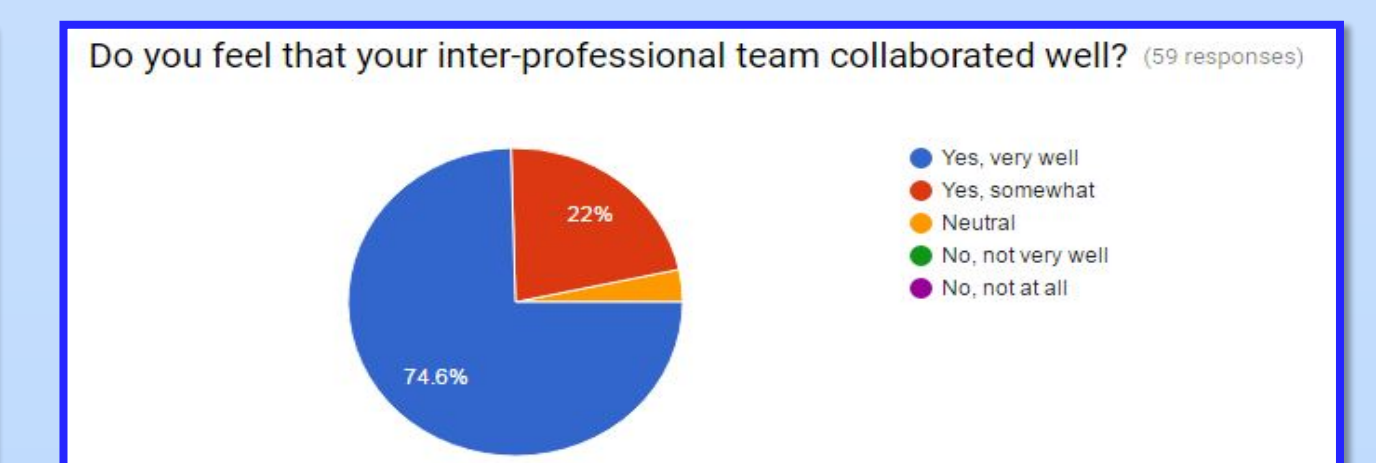
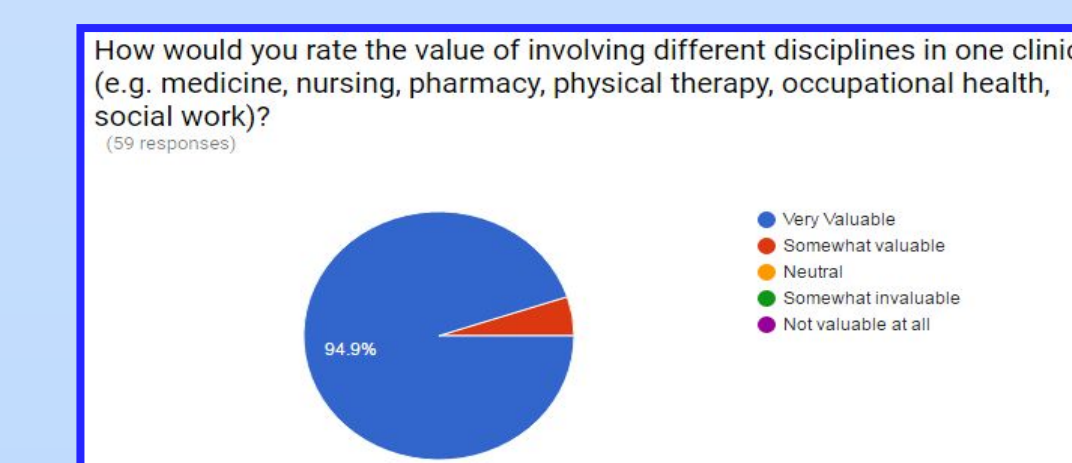
Apopka, 2016



Dominican Republic, 2015

Value of Interprofessional Education

In order to provide comprehensive care and an integrative learning experience, the Apopka clinic teams consisted of students and faculty in different disciplines. Volunteers (including faculty and students): **Medicine** (48), **Nursing** (15), **Physical Therapy** (16), **Pharmacy** (20), **Social Work** (17), **Chaplain** (1), **Photography/Video/Media** (3). **Total number of providers: 120.**



Electronic Medical Records

Documentation was done on the OpenMRS EMR system, a free, open-source software that relies on HTML-based forms. The EMR system was established on one laptop, which caretakers accessed from their personal devices via router. Triage, Pediatrics, Adult, and Gynecology sections were included in the forms. Child Development and Occupational Health History were included in order to address specific concerns of target population.



Visions Forward

Given the success of our inaugural clinics, MedPACT looks forward to establishing a sustainable program and continue providing care for the Apopka community several times a year. Additional services are actively being pursued, including mammograms, eye screenings, and vaccinations. MedPACT is also looking forward to partnering with the local Community Health Center and Grace Medical Home, a local medical home for low-income and uninsured, to provide more specialized and long-term care.

Acknowledgements

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