Healthcare Career Pipeline Network

Palm Beach County, Florida

A Report Researched and Presented by:

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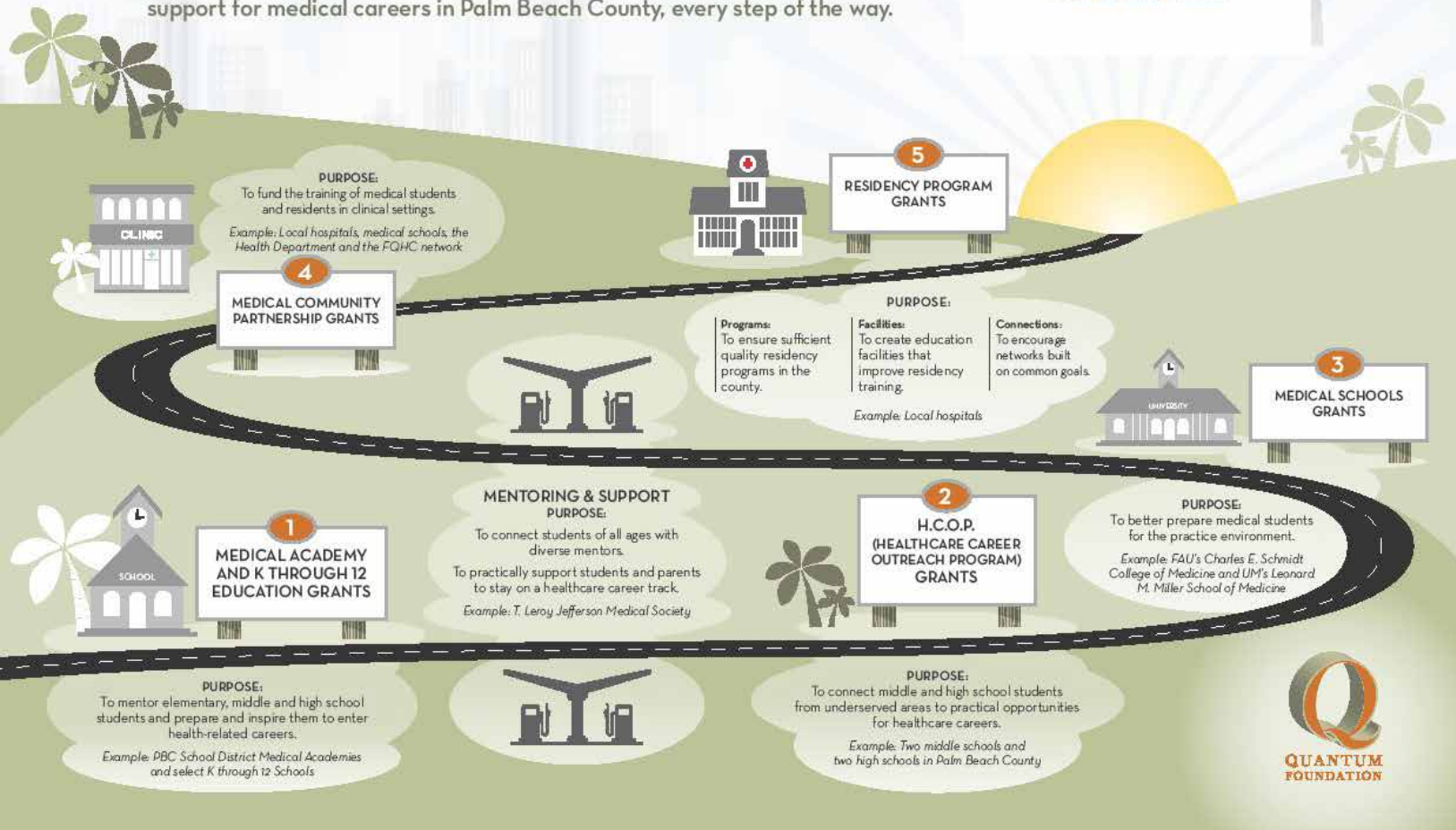**QUANTUM FOUNDATION**

QUANTUM FOUNDATION

How nine local organizations fund and support 10,000 students pursuing healthcare careers.

THE PATHWAY TO OUR VISION

How Quantum Foundation's continuum of grants provides opportunities and support for medical careers in Palm Beach County, every step of the way.

OUR VISION is for the people of Palm Beach County to enjoy better lives through quality health

5 RESIDENCY PROGRAM GRANTS

PURPOSE: To ensure sufficient quality residency programs in the county.

Programs: To ensure sufficient quality residency programs in the county.

Facilities: To create education facilities that improve residency training.

Connections: To encourage networks built on common goals.

Example: Local hospitals

4 MEDICAL COMMUNITY PARTNERSHIP GRANTS

PURPOSE: To fund the training of medical students and residents in clinical settings.

Example: Local hospitals, medical schools, the Health Department and the FQHC network

3 MEDICAL SCHOOLS GRANTS

PURPOSE: To better prepare medical students for the practice environment.

Example: FAU's Charles E. Schmidt College of Medicine and UM's Leonard M. Miller School of Medicine

MENTORING & SUPPORT

PURPOSE: To connect students of all ages with diverse mentors.

To practically support students and parents to stay on a healthcare career track.

Example: T. Leroy Jefferson Medical Society

2 H.C.O.P. (HEALTHCARE CAREER OUTREACH PROGRAM) GRANTS

PURPOSE: To connect middle and high school students from underserved areas to practical opportunities for healthcare careers.

Example: Two middle schools and two high schools in Palm Beach County

1 MEDICAL ACADEMY AND K THROUGH 12 EDUCATION GRANTS

PURPOSE: To mentor elementary, middle and high school students and prepare and inspire them to enter health-related careers.

Example: PBC School District Medical Academies and select K through 12 Schools

QUANTUM FOUNDATION

Introduction

Quantum Foundation is committed to providing opportunities and support for medical careers in Palm Beach County as one strategy to achieve their vision. As part of that strategy, the foundation convened stakeholders from organizations along the healthcare pipeline, who became the Healthcare Career Pipeline Network. This document describes the network, what it does, the accomplishments to date, and what makes it work.

What is the Healthcare Career Pipeline Network?*

The Healthcare Career Pipeline Network is a group of nine organizations in Palm Beach County that are individually working towards a common goal: increasing the number of Palm Beach County youth from under-represented minority groups that work in healthcare.

* See Appendix A for a description of each entity.

Why Focus on This Subject?

Data documents# that Palm Beach County not only needs more healthcare professionals, it also needs a more diverse healthcare workforce to serve its diverse population and create positive health outcomes for residents. Network members serve Palm Beach County, Florida, a county where 130 languages are spoken in the schools, 18% of residents are African American, 20% of the population identifies as Hispanic or Latino, and almost a quarter of all residents are foreign-born.

Members of the network provide programs in middle school, high school, and post-secondary institutions to promote interest in the health professions and to prepare students to be competitive in the medical field. The programs also connect students to the local workforce through clinical experiences and mentors and allow them to earn certifications – such as emergency medical responder and electrocardiograph tech – they can use upon graduation to get a job. Collectively, members of the pipeline serve over 10,000 students per year; 62% of them are from under-represented minority groups.

NUMBER OF STUDENTS AFFECTED

Middle School	1,703
High School	6,255
Post-Secondary	3,059
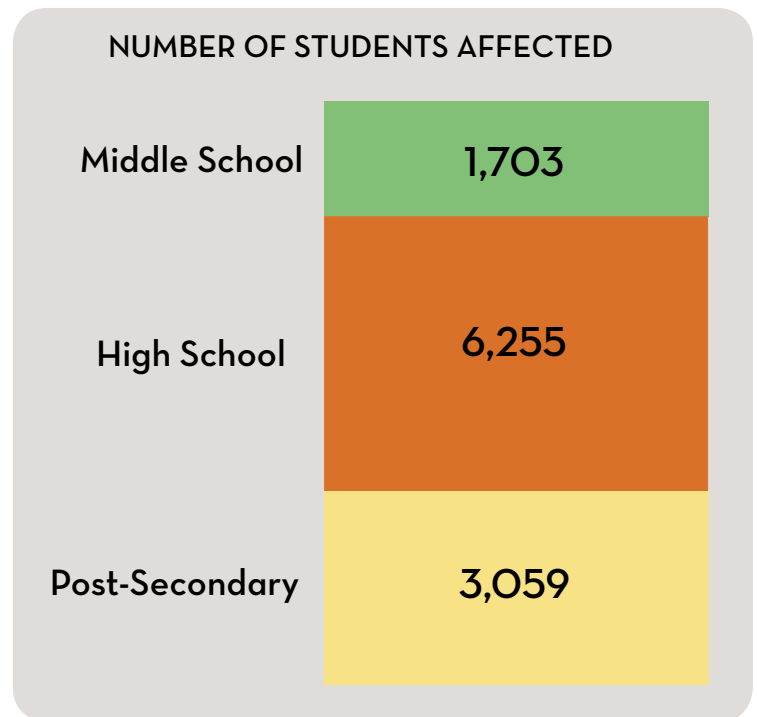
Quantum Foundation, a private grantmaker serving the county, is the convener of the network, as one of the foundation's strategies is to provide opportunities and support healthcare careers, in particular to create a more diverse healthcare workforce, as research has shown that greater diversity in the healthcare workforce increases healthcare access for the underserved.

Since 2014, Quantum Foundation has invested **$2,298,000** in this strategy, much of which was individual grants to members of the network.

Through that work, Quantum recognized the potential to build a network around a common agenda. They reached out to organizations individually to invite them to participate. Initial meetings focused on providing updates, but as the group developed, more members were invited, more collaboration occurred, and a syste, of shared measurement began.

See Appendix B for the data and theory behind the work.

Although not designed as such, the effort has similarities to the collective impact model. Most notably, it is a collaboration that seeks to drive impact – in this case, to impact the number of youth choosing to work in healthcare.

In addition, as described in this document, members share a common agenda, measure shared results consistently, provide mutually reinforcing activities, engage in continuous communication, and there is a backbone organization (Kania & Kramer, 2011).

Quantum Foundation serves as a funder for all organizations and also as the backbone organization for the network.

The graphic below provides details on the pipeline activities. Each network member is listed, and then how that organization supports and promotes healthcare careers for middle school, high school, and post-secondary students. The final column documents how members connect students to the workforce.

NETWORK MEMBER	PROGRAMS SERVING STUDENTS IN:			WORKFORCE CONNECTIONS
	MIDDLE SCHOOL	HIGH SCHOOL	POST-SECONDARY	
Education Foundation of PBC	Provides resources for the Medical Academies			
Florida Atlantic University	Healthcare Careers Outreach Program (HCOP) in middle and high schools, serving 800 students		School of medicine and allied health programs	
George Snow Scholarship Fund			Manages 20 scholarships annually and providers support to diverse medical academy and HCOP graduates	
Palm Beach Atlantic University		Nursing simulation program at one high school, includes career and educational coaching	Allied health programs	
Palm Beach State College			Allied health programs	
Palm Healthcare Foundation			Funds scholarships and promotes healthcare careers ("Thank a Nurse")	
Quantum Foundation	Provides resources for HCOP and Medical Academies		Funds scholarships for diverse students	
School District of PBC	Medical academies in 16 middle and 19 high schools, serving over 6,000 students			Engages the medical community for clinical experience / Students obtain certifications
T. Leroy Jefferson Medical Society		Outreach to engage diverse students in healthcare careers, reaching almost 1,000 students per year		Engages diverse healthcare practitioners for outreach and as mentors

How Does the Network Benefit its Members and the Community?

When interviewed, participants noted that participation in the network has generated two types of benefits:

1.) Benefits to the individual organizations:
- Stronger relationships
- Access to the knowledge and connections around the table
- Increased sustainability (indorectly)

2.) Benefits for the community:
Network members noted that although they knew each other prior to the first meeting – and work together outside of the network – they have built stronger relationships with the network partners.

Member partners noted:
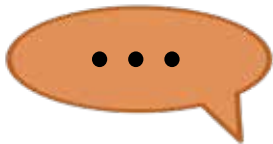
"In many cases organizations have their own [focus] but I think the network partners really see the big picture then we work together. Our relationship with the other partners has improved because of that connection."
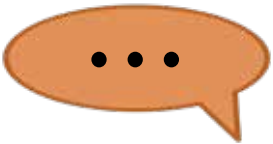
"The members are more familiar with us and because we're all part of the network, they're more likely to answer our calls or our requests or brainstorm ideas."

Members noted the value of accessing the knowledge and connections around the table. Having access to the contacts around the table is also important.

"I had a cold call from someone trying to find wraparound services and I referenced the network. I said, 'I don't have all the answers, but the people that are sitting around the table, they either know or they know who would know.'"
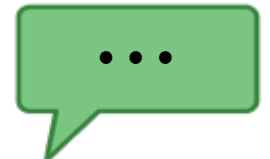
"Quantum is so well connected and they're so open with their connections. Palm Healthcare is the same way."
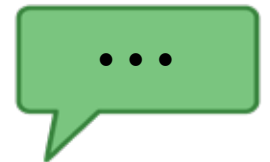
Although it was not a directly intended impact of the network, these stronger relationships allowed one program to increase sustainability.
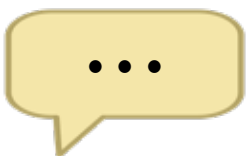
"By pulling everybody together we were able to look at areas to use funds without having to depend on a private foundation indefinitely."
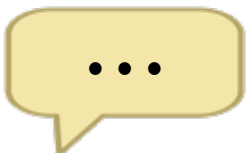
"There's potential is for our programs to be so much more stable because there are new partnerships that are developing if funding goes away."

By creating the platform for members to strengthen relationships and collaborate, the network can influence stability of the members' efforts.

Interviewees also noted that the network allowed them to reduce duplication of efforts in programming and not have to reinvent the wheel.

"Because everybody is affiliated with healthcare, but not necessarily doing the same thing, it adds value to brainstorming and it adds value to getting whatever the project is the person is working on done."
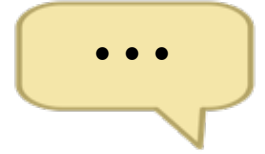
Network members also noted benefits to the community, such as improved programs and less duplication. Participation has improved programming through collaboration.
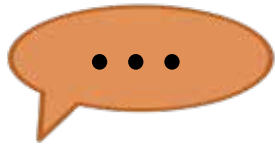
"To me, it is such a community partnership. As we go through that meeting, everybody is helping somebody in something, and that's what I think is the biggest thing."

Finally, members also noted the exponential value.

"I think that working together we've got a force to impact more students and more schools."
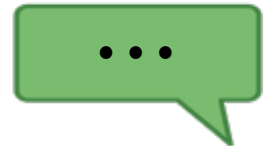
"The work that we are able to do collectively is always going to be so much more impactful."
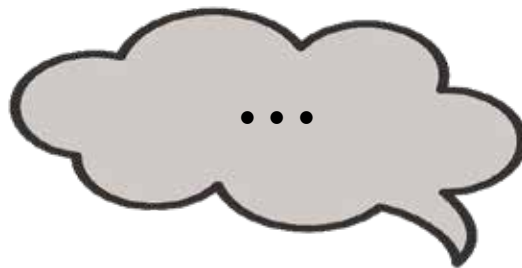
"Problems are multifaceted, right? Each of us in our own local education entity or nonprofit, we're tackling one piece of the issue. We can't solve the problem unless you tackle the entire continuum. I think that's what creating a consortium, or this network, or whatever term you want to put around it where everybody has their own motivators, their own gaps that they're trying to solve, but they fit in a line. They fit in the broader picture, is to me what the value of this group is."

What Have We Accomplishmented So Far?

Network members identified a number of accomplishments to date.

1

Creating the Pipeline

The creation of the pipeline means that students are supported from middle school through medical school. This support increases minority participation in healthcare professions.

One person said, "This group has created an actual pipeline. Middle school students can stay in an HCOP-funded program, which receives funding from the Quantum Foundation. They can participate in research activities funded through Palm Healthcare Foundation. They can graduate and get scholarships through George Snow to stay locally and they can study, learn, and go through enrichment activities as an undergrad and then apply into the College of Medicine without ever having to leave the network."

Another said, "Everybody's mission is very much aligned in terms of what their goals are and what they're working towards. And a lot of the objectives that help each group or each agency, when they accomplish those objectives, it helps the others. So there is the collective benefit to it that I think that they all realize that's very natural."

2

Improved Programming

For example, all network partners – even the newest members – helped the George Snow Scholarship Fund promote the opportunity and obtain competed applications. George Snow staff provided several examples, including the following: "Christine said, 'I'm going to Boynton; I'm going to help them fill out the application.' I mean, it was amazing. I had met her one time."

George Snow and T. Leroy Jefferson also partner to provide mentors for students receiving scholarships funded by Quantum Foundation. T. Leroy Jefferson recruited volunteers from its members so that students had mentors in the healthcare field.

3

New Resources and New Programs for the Community

In addition to the regular network meetings, one of the stakeholders from FAU's College of Medicine met with the staff and board chair of T. Leroy Jefferson. These meetings resulted in a new summer research internship (including a partnership with the two organizations) which will be hosted at Triple O Research Institute. This created a new opportunity that didn't exist before for high school students.

In another example, FAU heard of a grant to expand the pipeline and members met to work on the submittion, sharing contacts and supporting the application. As one person noted: "Everybody got involved in this grant."

(4)

Shared Metrics and Measurements

A final accomplishment and one that is critically important in demonstrating the collective impact of a network, the establishment of shared metrics and shared measurements.

One person noted that "Those common metrics help the group see how they fit together." Another said, "The benefit is gathering data." A third noted, "Developing standard metrics will greatly impact how we serve the community by helping us secure more funding and accurately target specific illuminated needs."

A list of outcomes was identified from existing research, and then the group identified four that they would like to measure:

1.) The percentage of medical academy/HCOP students that enroll in college.

2.) The number and percentage of students obtaining certifications for healthcare jobs.

3.) The percentage of students increasing or maintaining interest in a healthcare career.

4.) The percentage of students reporting that the program (whether George Snow, HCOP, medical academies, or T. Leroy Jefferson) supported their pursuit of a healthcare career.

In order to collect data for outcomes 1 and 2, Dr. Benavente, director of the medical academies, connected Randy Scheid from Quantum Foundation with the district's research department. To measure outcomes 3 and 4, Quantum Foundation's evaluator generated questions for each entity to add to existing surveys and helped implement that process. This process is in the pilot stage. In the meantime, data from prior evaluations exist for each measure (see table below), but results are not aggregated across network members.

MEASURE	DATA
The percentage of medical academy/HCOP students that enroll in college.	Over 84% of medical academy graduates enroll in college in the first year after graduation.
The number and percentage of students obtaining certifications for healthcare jobs.	In 2016-2017, medical academy completers earned almost 1,300 certifications for healthcare jobs.
The percentage of students increasing or maintaining interest in a healthcare career.	96% of HCOP middle school students indicated a desire to stay in the HCOP program as they transitioned to high school. In the last five years, 74% of middle school medical academy students enrolled in the high school program.
The percentage of students reporting that the program (whether George Snow, HCOP, medical academies, or T. Leroy Jefferson) supported them in pursuing a healthcare career.	87% of medical academy students reported that participating in the medical academy helped them towards their goal of working in healthcare.

Finally, members noted:

"It is a major accomplishment just to get these Palm Beach County healthcare stakeholders at one table, not because we aren't all motivated to serve but because everyone is so busy – busier than a 40-hour work week. Quantum is uniquely positioned to assemble and lead this network because Quantum funds all of Palm Beach County."

What Makes It Work?

Members noted that the group works for a number of reasons. First, everyone is committed to a common goal. As one person noted, "I know we have a very unique group here, but I think what the success is is that everybody is working together for one cause, and nobody is being selfish for their different agencies. Everybody is for the same cause and our cause is all about the kids and about educating the kids and about the retention rate of the kids. And I think that it makes us unique that we're all working for one goal and that's the kids." Another said, "Well, I think the diversity, but given that diversity, I think the common focus or common interests in educating the next generation of healthcare professionals and providers. Though we're all doing slightly different work, or in some cases, you know, significantly different work, there is an intersection at the point of education."

Second, the group has developed good working relationships. As one person noted, "I feel like in that meeting is everybody is always willing to jump in to help and in any way they can. In some of these committees that I have been on nobody is stepping up." The foundation works to ensure that everyone has an equal voice and is equally appreciated and that their work is equally respected. In addition, as one person said, "The people that are there representing the different agencies are all very amenable in the partnerships. They're very open. They are very proactive with developing new partnerships."

Third, the structure isn't forced. The foundation did not convene the group with the expectation that the group had to develop a program or project or that they were required to work together. Each meeting has agency updates that leads to informal collaboration and problem-solving as needs emerge.

As one person said, "I think the looseness of the network is helpful. You know, it's not a super formal group or structure. I think that is good and helps us work well together because it allows for some freedom." On the other hand, there was a deliberate effort made to structure the group. For example, one participant noted that "I think it is Quantum's goal to have representation from each type of stakeholder in the PBC healthcare community at the table. That is what makes this group unique." When recruiting members, the foundation worked to "make sure everyone understands why this group is being brought together and what the mutual benefit is."

Quantum Foundation's mission is to fund initiatives that improve the overall health of people living in Palm Beach County. In its 20th year of community investment, the foundation has assets of approximately $150 million and since its inception has awarded $125 million to hundreds of local nonprofit granteess. Every dollar the foundation grants stays in the county to benefit local communities.

Palm Healthcare Foundation a health-focused foundation. The foundation offers nursing scholarships, some of which are managed by George Snow Scholarship Fund. Palm Healthcare Foundation also supported membership dues for 15 student so that they could become members of the T. Leroy Jefferson Medical Society.

FAU Schmidt College of Medicine provides the Healthcare Careers Outreach Program (HCOP) in middle schools and high schools, serving over 800 students annually. HCOP prepares students to successfully pursue careers in medicine by engaging premedical and biomedical academy students in the School District of Palm Beach County in immersive activities. The program includes advanced simulations and practical applications in addition to field trips to FAU's College of Medicine and the FAU Simulation Center. FAU College of Medicine students interact with (i.e., teach, lecture) local high school students during their visit to FAU. Local students also attend FAU to obtain health-related degrees.

Funded by Quantum Foundation, the George Snow Scholarship Fund's Health Professions Scholarship Initiative provides 20 need-based scholarships and direct support services annually to students who are committed to a career in healthcare. The program targets students who participated in the Palm Beach County School District's High School Medical Academies Program or the Florida Atlantic University College of Medicine's Health Careers Outreach Program (HCOP). Students attend Florida Atlantic University, Palm Beach Atlantic University, and Palm Beach State College.

The Education Foundation of Palm Beach County supports public education through partnerships, grants, events, and public awareness. They are also one of the funders of the medical academies. The foundation connects the public school system, the private sector, and the community, so that students achieve academic and post-graduate success. The foundation supports programs that inspire excellence and support achievement, one student at a time.

In Palm Beach County, premedical sciences programs (academies) are offered in 16 middle schools and 19 high schools, with over 7,800 students participating annually. The program emphasizes science, math, and language skills while preparing students to be competitive in the medical field. As students can only participate in one academy in high school, the program also helps students decide about continuing in medical sciences in high school or choosing another interest.

Palm Beach Atlantic University offers a school of nursing as well as degree programs in the healthcare field. The university's Nursing Simulation Program provides simulation experiences to Forest Hill Community High School Academy students. They also coach students to assist them in establishing a pathway towards career growth via secondary education in health sciences. There are currently 249 students in the medical academy program; 64 of these students are in the allied health classes that are incorporated into the four-year program.

T. Leroy Jefferson offers a variety of programs to encourage underserved youth to pursue healthcare careers. Programs include a medical externship for Palm Beach County students, a healthcare and science symposium, Dream Big Career Day, scholarships, and road to success videos. The society provides mentors to 20 students receiving scholarships through the George Snow Scholarship Fund Health Professions Scholarship Initiative. In addition, young people can choose to become members of the medical society.

Palm Beach State College, founded in 1933 as Florida's first public community college, is a diverse, comprehensive institution dedicated to serving the county's educational needs. Integrally linked to the community through strong partnerships, the college provides associate and baccalaureate degrees, professional certificates, workforce development, and lifelong learning. Palm Beach State College's mission is to create a dynamic teaching and learning environment that provides a high-quality, accessible, and affordable education to prepare students to contribute and compete ethically and successfully in a diverse global community.

In Brief

The Healthcare Career Pipeline Network is group of eight organizations in Palm Beach County that are individually working towards the common goal of increasing the number of Palm Beach County youth that work in the healthcare field.

For the organizations, the benefits of participation include stronger relationships, access to the knowledge and connections around the table, and – indirectly – increased sustainability.

For the community overall, the network members have improved programs, ensured less duplication, and generated greater impact than could have been achieved individually.

Network members identified a number of accomplishments to date: creating the pipeline, improved programming, bringing new resources and new programs to the community, and shared measurement.

Members noted that the group works for a number of reasons:
• Everyone is committed to a common goal
• The group has developed good working relationships
• The structure isn't forced.

Appendix B: Theory Behind the Work

Palm Beach is medically underserved, making evident the need for an increased healthcare workforce.

Palm Beach County has eight medically underserved areas (HRSA, n.d.), 12 primary care health professional shortage areas, seven dental care health professional shortage areas, and four mental health professional shortage areas (FDOH, 2016).

In Palm Beach County, demand for physicians exceeds supply by more than 9%.

It is not just the number of healthcare workers: Palm Beach County is diverse and Florida's healthcare workforce does not reflect the diversity of its population (USDOL, 2010).

Greater diversity in the healthcare workforce increases access for the underserved (Cohen, Gabriel, & Tennell, 2002; Grumbach & Mendoza, 2008) and health outcomes.

There is consistent evidence that race, ethnicity, and language influence the quality of the doctor-patient relationships (Ferguson & Candib, 2002).

Minority patients are more likely to choose a minority physician and be more satisfied in language-concordant relationships (Ferguson & Candib, 2002).

In addition, effective doctor-patient communication can improve outcomes measures such as adherence to treatment and disease outcomes (Ferguson & Candib, 2002).

The lack of workforce diversity is due to several factors, one of which is poor academic preparation in primary and secondary schools for low-income minority students (Cohen, Gabriel, & Tennell, 2002; Grumbach & Mendoza, 2008).

Other barriers include the cost of professional health education, the complexity of the financial aid process, and the absence of mentors (Statehealthfacts.org).

Nationally, 55% of students who start in any type of college or university complete a degree or certificate within six years.

Among Hispanic and Black students, those rates are 46% and 38% respectively (Shapiro et al., 2017).

Research documents that many variables impact college persistence rates. For minority students, key factors are academic preparation, adequate financial aid, and strong support networks (Carter, 2006).

Interventions in the educational pipeline, however, increase minority participation in healthcare professions (Grumbach & Mendoza, 2008) and student body diversity is associated with preparing students to meet the needs of a diverse population (Saha, Guiton, Wimmers, & Wilkerson, 2008).

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