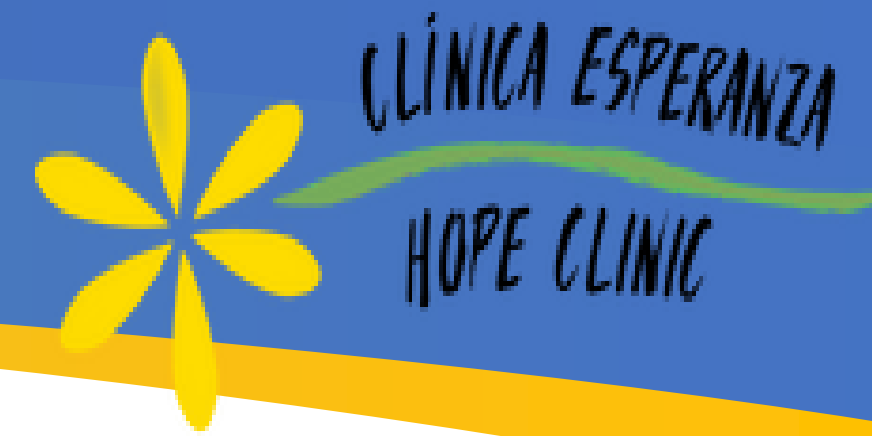




Making an IMPACT on diabetes treatment in a low socioeconomic population through the creation of a PA Student run Diabetes clinic in Providence, RI

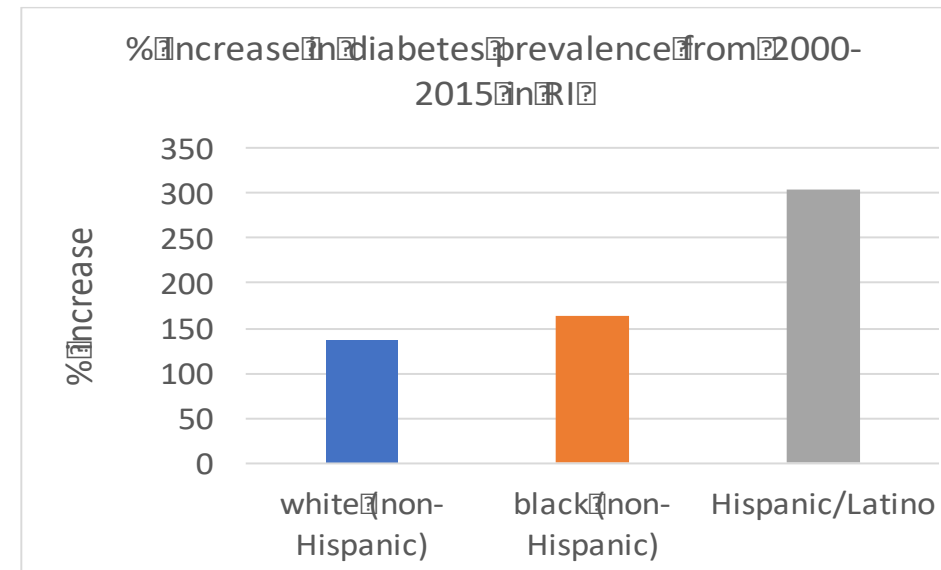


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INTRODUCTION – THE PROBLEM

According to the American Diabetes Association (ADA), diabetes mellitus (DM) and its complications are the 7th leading cause of death in the United States, directly attributing to 76,488 deaths in 2014. Over 29,000,000 Americans have been diagnosed with DM with an associated annual health care cost of \$245 billion dollars in 2012. Early proactive treatment and patient education is key to reducing costs, preventing disease complications and achieving better outcomes in diabetic patients. While DM affects patients from all demographics, it is found at higher rates among low socioeconomic minority populations. This is especially true in Rhode Island where the prevalence of diabetes has increased over 300% in the Hispanic population alone, where 1 in 8 people carry the diagnosis of diabetes.



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HOW CAN WE AS STUDENTS ADDRESS THIS ISSUE

The early goal's of our project were:

1. To establish a working relationship with a free clinic in the state of RI where Bryant University Physician Assistant students throughout all levels of their training could be a resource to an at need population, while at the same time gaining valuable hands on clinical experience.
2. To recruit faculty and adjunct preceptor support in order to supervise Bryant PA students in a clinical setting
3. To identify a potential funding source to help cover the cost of materials and testing supplies needed for a working clinic.
4. To identify specific metrics to track efficacy of the care provided by the PA Student clinic.
5. To use new technology or a novel approach to health care to add improve access to resources not currently available within the clinic setting.

A plan takes shape

1. Utilizing contacts within the current student body, an early relationship was forged with Clínica Esperanza/ Hope Clinic (CEHC). CEHC offers free primary medical care to a predominately immigrant, uninsured and largely Spanish-speaking patient population in Providence, RI. The idea of a Physician Assistant (PA) student run diabetes clinic was not only beneficial to patients, but would provide a future pipeline of volunteer medical providers.
2. With this relationship in place, key members of the Bryant University PA faculty offered their support for the clinic project.
3. Members of the Class of 2019 identified the PA Foundation IMPACT grant project as a prime candidate for funding and crafted a grant proposal that would cover supplies and testing kits for 50 diabetic patients for 1 year. The proposal was accepted and \$9,976 dollars in seed funding was in quickly in hand.

A plan takes shape - continued

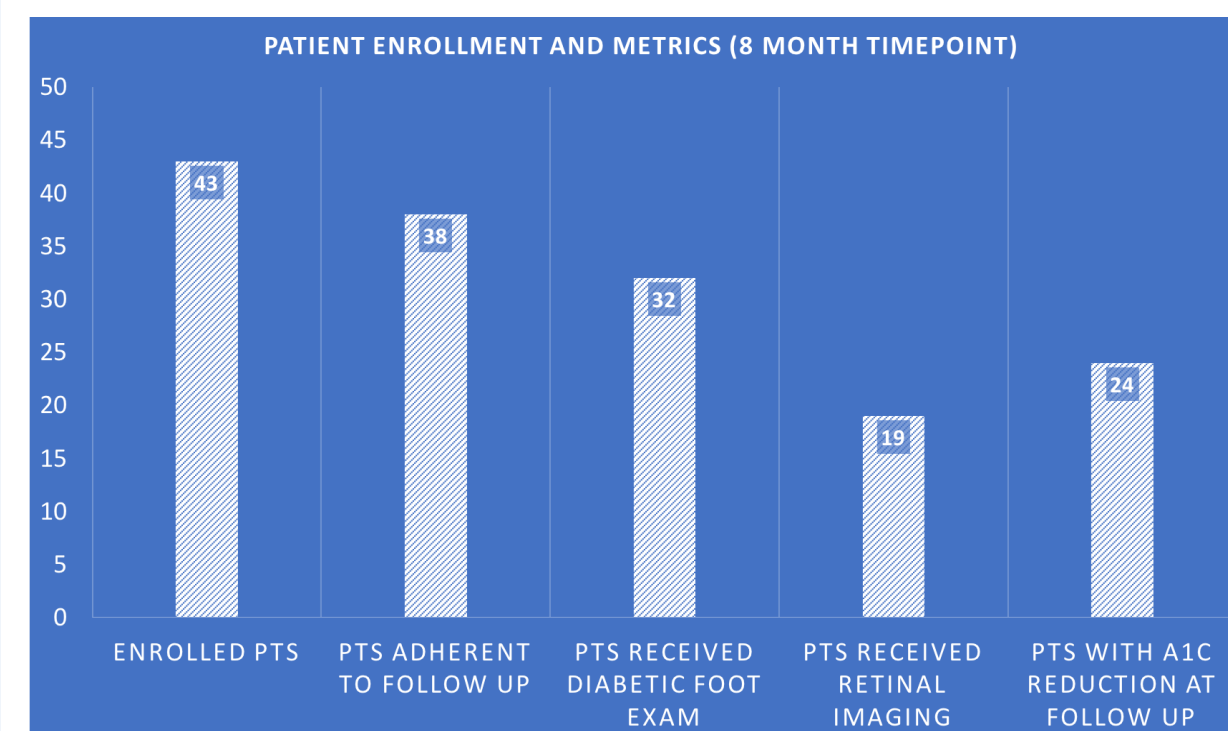
4. PA program faculty and students decided to focus on implementing the six core elements outlined in the ADA's 2017 DM Standard of Care Position Statement with an emphasis on patient education and access to ophthalmologic exams. Metrics including weight, BMI, blood pressure, A1C, lipid profile, monofilament foot exam and a diabetic retinal exam were chosen to be monitored.
5. We immediately identified access to diabetic retinal exams as an issue for all diabetics, but one that was particularly lacking in low income populations. We were able to receive a donation from Welch Allyn of a RetinaVue retinal camera, which would allow us to take high quality retinal images of diabetic patients eyes, that could then be read through a HIPPA compliant server by licensed ophthalmologists.

PUTTING A PLAN INTO ACTION



With a plan in place and funding secured a core team of clinical year students from the class of 2019 (Joseph Desrosiers II, Megan Macomber, Thomas Bales) worked with clinic leadership to identify a panel of 50 poorly adherent diabetic patients from within the current clinic patient census. With a patient panel in hand, necessary supplies were ordered, a schedule was devised and approved by preceptors and clinic staff and on July 8, 2017 we began to see our first patients. The clinic now operates every other Saturday from 8am-1pm and as of February 17's clinic, we have integrated PA students from all 4 matriculated classes of the Bryant University PA Program.

RESULTS



We are currently 8 months into seeing patients at the PA DM Clinic. While it is too early to begin to evaluate target metrics, we are seeing promising trends in A1C levels in patients that were enrolled early on in the clinics inception. We are on target to have a full panel enrolled by the end of our 9th month.

MOVING FORWARD

The original grant proposal for the funding of our clinic was expected to fund testing supplies, eye exams, and glucose monitoring supplies for 50 patients for 1 year. With frugal use of grant funds, we expect to be able to maximize funding to extend the clinic to a second year while locating additional funding sources to expand the scope and enrollment of the current clinic.

Current initiatives include:

1. Expansion of diabetic retinal exams to additional clinic patients possible by a \$1,000 Be The Change grant received by Thomas Bales, from the NCCPA Health Foundation
2. Collaboration with the Brown Medical Student clinic at CEHC to expand access to diabetic retinal exams for the patient census using the Welch Allyn RetinaVue system.
3. Identifying and applying for larger grants to expand the scope of the Bryant PA Clinic at CEHC, and increase patients census.

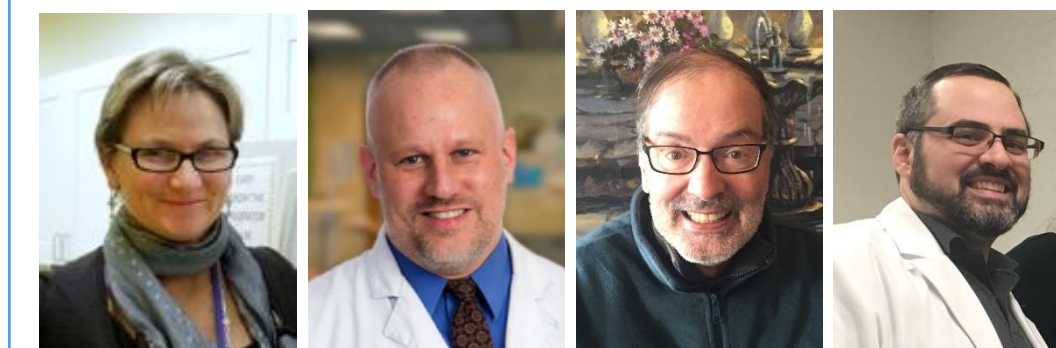


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AKNOWLEDGEMENTS

The early success of this clinic is due to in large part to the guidance and leadership of our clinic medical director, clinical preceptors, and amazing support staff at Clínica Esperanza.



Left to right: Dr. Anne De Groot, M.D., Volunteer Medical Director, Clínica Esperanza; Robert Jay Amrien, PA-C, Director, Bryant University PA Program; Walter "Wally" Deluca, PA-C, Clinical Preceptor; Kevin Santilli, PA-C, Clinical Preceptor.



Left to right: Valerie Almeida Monroe, R.N., Clinic Nurse Manage; Community Navegantes – Damaris Rosales, Rosa Roman, Cindy Estrada and Brenda Veliz

GRANT SUPPORT



Implementation of this clinic project could not have been made possible without the generous financial support of the PA Foundation's IMPACT grant program, as well as the NCCPA Health Foundation "Be The Change" grant program.

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