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# Project Kids CLUB: establishing a pediatric occupational therapy department in the public sector in Trinidad and Tobago

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BOSTON UNIVERSITY  
SARGENT COLLEGE OF HEALTH AND REHABILITATION SCIENCES

Doctoral Project

**PROJECT KIDS CLUB:  
ESTABLISHING A PEDIATRIC OCCUPATIONAL THERAPY  
DEPARTMENT IN THE PUBLIC SECTOR IN TRINIDAD AND TOBAGO**

by

**ANASTASIA RAQUEL MARTINEZ**

BScH, Queen's University, 2011  
MSc, Columbia University, 2015

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requirements for the degree of  
Doctor of Occupational Therapy

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Approved by

Academic Mentor

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Karen Jacobs, Ed.D., OTR, OT, CPE, FAOTA  
Clinical Professor of Occupational Therapy

Academic Advisor

---

Karen Jacobs, Ed.D., OTR, OT, CPE, FAOTA  
Clinical Professor of Occupational Therapy

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I truly hope that all of our efforts combined will make a difference in public-sector occupational therapy in Trinidad and Tobago.

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**ANASTASIA RAQUEL MARTINEZ**

Boston University, Sargent College of Health and Rehabilitation Sciences, 2018

Major Professor: Karen Jacobs, Ed.D., OTR, OT, CPE, FAOTA, Clinical Professor of Occupational Therapy

**ABSTRACT**

The benefits of occupational therapy (OT) intervention for children with disabilities are numerous and impactful. Among many other advantages, OT can help children to develop their functional living skills, form relationships with others, improve in motor co-ordination, and transition to adulthood (American Occupational Therapy Association [AOTA], 2015). Restricted access to treatment, therefore, can deprive the child, and his or her family of the opportunities to reach their fullest potential. In Trinidad, pediatric occupational therapy is available at private clinics at great costs to families. This is incongruous with the healthcare climate of the nation, in which public-sector care is offered free of charge. Unfortunately, there are no pediatric Governmental OT positions available. Families who cannot afford OT simply will have no access to the services.

Three major explanations for the lack of public-sector OT could potentially include doubts of the demand for OT, lack of qualified therapists in the country, and the inability to supply necessary space and equipment. Project Kids CLUB responds to each of these concerns. Primary research demonstrates the irrefutable desire for services, the

local Master of Occupational Therapy program provides sufficient staff, and past attempts to begin such a unit resulted in designated space and materials at the Eric William's Medical Sciences Complex (EWMSC), a public-sector hospital in Trinidad.

The realization of Project Kids CLUB has the potential to change the landscape of pediatric care for children and families, the Government, and occupational therapists. Families will benefit from free access to quality care that can increase participation, quality of life and wellbeing. The Government will meet an important societal need, as well as fulfill some of its promises to human rights treaties. Occupational therapists will have the opportunity to impact the public-sector and serve one of the most vulnerable groups of clients.

The information presented in this project will be disseminated to the target audiences to raise awareness of pediatric OT in hopes that one day, the proposed Centre for Learning and Understanding Behavior (CLUB) may come to fruition. Findings demonstrate that there is demand for and benefits of pediatric occupational therapy, as well as a realistic means of establishing a unit. This project demonstrates that there is no excuse for the lack of services, and no excuse for any child to be left without access to occupational therapy intervention.

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## **CHAPTER 1- Introduction**

Occupational Therapy (OT) in the public sector in Trinidad is limited to adult mental health in-patient services, provided by a single occupational therapist. Though Tobago benefits from public sector OT provision, in the larger, more populous of the two islands, Trinidad, other occupational therapy services are conducted privately. Whereas public sector health care is free of charge, there are steep costs attached to private services. There are eight occupational therapists practicing privately in pediatrics in Trinidad. That is, eight therapists to treat the surplus of 3,000 children with disabilities (Ministry of the People and Social Development, Social Investigations Division, 2013) and over 3,000 families that need to be able to afford private therapy. These gloom statistics highlight two problems: the shortage of therapists, and the lack of OT representation in the public sector. The new Master of Science in Occupational Therapy degree program, which began at a local university in September 2016 (Garcia, Kugel, Javaherian-Dysinger, & Huecker, 2016), will help to ease the first problem. What of the public-sector representation though? With no positions in the Government service, these graduates will also enter the private sector. There will be more therapists available, but no change in the access to affordable treatment.

Occupational therapy available in the public sector in Trinidad is offered in psychiatric settings. At present, one therapist is employed by the North West Regional Health Authority to oversee the department at St. Ann's Psychiatric Hospital. With any population, occupational therapy uses therapeutic activity to help persons who have suffered injury or disability to function as optimally as possible in daily life. Mental

health OT covers a range of topics geared toward patient function, including social skills, health and hygiene, communication skills, and anger management in addition to more vocational tasks such as sewing, gardening, woodworking and cooking. Although the department is equipped to handle an adult mental health caseload, it is not appropriate for a pediatric population. The Diagnostic and Statistical Manual of Mental Disorders (5th ed.; DSM-5; American Psychiatric Association, 2013) speaks not only of conditions that affect adults. Its subsection on neurodevelopmental disorders addresses childhood conditions such as Autism Spectrum Disorder, Global Developmental Disorder, Developmental Co-ordination Disorder, and Specific Learning Disorder. Therapies for such conditions are not yet addressed in public-sector care.

In 2008, the Ministry of Education contracted the US-based research team, Miske Whitt and Associates (Peters et al., 2008), to conduct a 12-month study that culminated in the document entitled, *Achieving Inclusion: Transforming the Education System in Trinidad and Tobago*. The team visited 42 schools, both primary and secondary, across all seven districts of Trinidad and Tobago. They disseminated surveys to 460 primary schools, 150 secondary schools and 29 special schools. The final report spoke of the dire need for early intervention and assessment given survey results showing relatively high numbers of both diagnosed and suspected disabilities in schools nationwide. The researchers postulate, “the majority of classrooms will have a student with an emotional/behavioral disorder, and one out of every three classrooms will have a student with a cognitive impairment or learning disability, or one who is gifted and talented” (Peters et al., 2008, p. 6).

A decade later, there remains a significant population of children with disabilities with no access to occupational therapy services. The discussion that follows will provide unwavering evidence that occupational therapy, when provided early, can have a significant positive impact on the levels of independence and productivity that children with special needs such as these will experience later on in life.

### **Importance of the Problem**

The percentage of children with disabilities currently receiving occupational therapy treatment is an indicator of the need for services. There are five pediatric clinics in the country that accommodate less than 1% of children with special needs. This means that 99% of children with disabilities go untreated. Skilled intervention has been shown to significantly increase the independence and capabilities of children with a variety of special needs.

In a case study conducted by Lerslip, Putthinoi and Panyo (2016), a rigorous fine motor activities program showed obvious improvement in the coordination, prehension and dexterity of an 8-year-old boy with Down's syndrome. Another study by Sherry et al (2015), found that intensive occupational and physical therapy could significantly reduce pain and improve function in adolescents with fibromyalgia. Maeir et al (2014), investigated the effectiveness of a 12-week cognitive function intervention on 19 children with attention deficit hyperactivity disorder (ADHD). The authors found that one-hour sessions with parent and child were sufficient to improve occupational performance in the areas of social participation, activities of daily living, academic and leisure domains. These gains were not experienced by children in the control group and persisted in the

four-month follow-up.

Pffeiffer, Koenig, Kinnealey and Henderson (2011), provide further evidence for the effectiveness of occupational therapy intervention in treating developmental disability. The authors studied the effectiveness of a sensory integration intervention on a group of 39 children with Autism Spectrum Disorder (ASD) and Pervasive Developmental Disorder (PDD) not otherwise specified (NOS). Findings showed that 18 forty-five-minute-long treatment sessions over the course of 6 weeks spurred significant progress towards the participants' individual therapy goals, and to reduce autistic mannerisms.

Wu, Hung, Tseng, Huang (2013), investigated the effects of constraint-induced movement therapy (CIMT) on a group of children with hemiplegic cerebral palsy. Two occupational therapists administered this intensive program for 2.5 hours per day, 5 days a week for 4 weeks. The authors found that CIMT was successful in significantly improving all outcome measures in the treatment group. Such outcomes included functional use of the affected upper extremity, self-care task completion and spontaneous use of the affected limb. These results persistent at the 1- and 3-month follow-up.

The benefits of occupational therapy extend beyond the direct influence on the child to impact caregivers as well. Gee and Peterson (2016), explored the effects of educational sessions on the parents and teachers of children with ASD. The authors found that in six sessions, caregivers were significantly more knowledgeable of the sensory processing component of ASD and were more confident in dealing with behaviors at home and in the classroom. The influence of occupational therapy for the child, and the

community as whole can lead to an improved quality of life for thousands of children and families treating with special needs. These studies support that the inclusion of occupational therapy services in the public-sector provision is of highest priority.

### **Proposed Intervention**

To address the concerns described, this project takes the form of a program proposal to be submitted to the Government of Trinidad and Tobago advocating for the inclusion of occupational therapy services into the public healthcare system in Trinidad. As the title of this project states, the name of the unit will be Kids CLUB; the Center for Learning and Understanding Behaviour. The logic model provided in Appendix A maps out the problem, proposed solution and goals of Project Kids CLUB. It provides evidence to advocate for the necessity of therapy and will spur discussion on the inclusion of this service into the public sector. Though literature review of international studies provides evidence for the benefits of occupational therapy to the pediatric population, primary research conducted via a survey distributed to the parents of children with disabilities assisted in gathering data to prove the local demand for public sector OT. It is hoped that this evidence will appeal to the hearts of decision makers. At the very least, this project will open the eyes of Government authorities to wield their power to create a better future for our most affected children. The true dream for this project extends beyond the length of this academic paper. On the grandest scale possible, the desired outcome is that it will materialize into a physical structure: a state of the art pediatric clinic with the capacity to facilitate children with a variety of special needs. In time, clinics will open in multiple parts of the nation, further boosting accessibility. One day, there will be no excuse for

any child in Trinidad and Tobago to be left behind without the proper occupational therapy services.

### **Domain of Occupational Therapy**

The American Occupational Therapy Association's (AOTA) Occupational Therapy Practice Framework (AOTA, 2014), speaks of the process that occupational therapists use to treat a client. This process includes evaluating the individual, analyzing their performance, providing skilled intervention, and measuring progress. Should a public-sector program be implemented, facilities and materials need to be in place to ensure that practitioners are able to follow this process optimally. Only then would occupational therapists be able to address the occupations of the child, be it activities of daily living, play, or social participation for example.

The focus of this project on the design of a pediatric occupational therapy department is tightly interwoven with the context and environment referred to in the OTPF. In trying to establish a physical structure, elements of the social environment, and the cultural, personal and temporal contexts come into play. In this case, the social environment refers to the expectations that stakeholders such as caregivers, clients, staff and therapists have of the department. Such expectations will play an integral role in the investment in the department.

Temporal context involves the acknowledgment that early intervention is the most beneficial treatment for children and families. Personal factors refer to the characteristics of those who will most benefit from having an OT department at this site. This includes low-income families, and families that cannot access care in another location. Cultural

context is immensely important in the planning of this project. All therapists currently practicing in Trinidad and Tobago have trained abroad. Ensuring the cultural relevance of the first OT department in Trinidad is paramount. Cultural awareness will increase the probability of a successful and long-lived department.

### **Conclusion**

In conclusion, there is a large body of evidence for the benefits of occupational therapy for children with disabilities and their families. The proposal of an occupational therapy pediatric department in the public sector in Trinidad is a novel approach. Careful planning, based on the unique context and environment of the island will ensure that families that would most benefit are given the opportunity to access services for their children.

## **Chapter 2- Theoretical and Evidence Base to Support the Project**

The purpose of this chapter is to describe the theoretical basis of the problem. The chapter begins with an exploration of the factors that lead to the lack of pediatric occupational therapy services in the public sector in Trinidad. It looks specifically at four factors: (1) the shortage of occupational therapists, (2) the previous lack of an occupational therapy educational program, (3) the tendency of families to hide a disability, and (4) the lack of emphasis on special needs in the governmental agenda.

The subsequent section provides current social, political, educational and professional trends that are potential solutions to the four major concerns identified previously. This section talks about the increase in therapists, the initiation of the Master's program, the pride and acceptance for disability, and the government's attempts at addressing special needs. The section ends with the acknowledgment that such trends are not isolated to Trinidad and Tobago, but are based on international movements.

Next, the theoretical framework that underlies the concept of change in the healthcare sector in Trinidad and Tobago is presented. The theory of institutional isomorphism (DiMaggio and Powell, 1983) examines the coercive, mimetic and normative forces that act on institutions, and result in homogeneity of organizational structure and practice. This theory is used to explain the positive impact that international institutions, models of practice and professional standards have on the local healthcare system, and how they combine to influence the growth and expansion of occupational therapy to the public sector in Trinidad and Tobago.

The final section describes the attempts that have been made thus far to initiate

pediatric public-sector OT. This includes efforts by a medical doctor and the Trinidad and Tobago Association. Acknowledgement is given to the benefits of these actors toward the realization of the current project.

### **Overview of the Problem**

There are four factors that explain the lack of public sector pediatric services in Trinidad. First is the shortage of occupational therapists. Currently, there are 21 registered therapists in the country, but only 16 practicing (Council of Professions Related to Medicine, 2017). There are four therapists practicing full time in pediatrics, and a further four working part time in this area. These therapists practice primarily in the nation's capital, leaving little access to those children residing in rural areas. Such few therapists have made it difficult to rally for public sector service provision.

Figure 2:1 demonstrates the linkages among the four factors described in this discussion. It is hypothesized that increasing OT education, the number of therapists, the visibility of persons with disabilities and the importance of special needs issues in the Governmental agenda will increase awareness of the field of occupational therapy, and the benefits that it can have for children and their families. Increased demand and awareness will encourage officials to adopt the proposed plan, thus improving occupational therapy service provision in Trinidad.

Second is the previous lack of a formal occupational therapy education in the Caribbean. Occupational therapy is a two-year Master of Science degree that was previously only offered abroad. Prospective students would have had to uproot their lives, move abroad and attain foreign currency to be able to access training. These barriers have

resulted in small numbers of therapists. In September 2016, a three-year Master of Science in Occupational Therapy degree began at the University of the Southern Caribbean, with nine students matriculating. Should they all graduate, this program will increase the number of therapists in the country. A growing number of therapists will facilitate expanding occupational therapy services into the public sector.

The third reason for the lack of occupational therapy services in Trinidad relates to the tendency of families to conceal disability. In Trinidad and Tobago, there has been a somewhat archaic view that children with disabilities should be hidden from the public. Families would keep children with special needs at home, and care for them fully, without giving them the opportunity to achieve their fullest potential. This means that parents would not actively seek services for their children, lessening the demand on the government to improve these services. As of recently, the idea that persons with special needs can in fact be productive members of society has encouraged families to seek supportive services. Underdeveloped public-sector facilities push families to access costly private sector alternatives.

Lastly, the low priority of special needs services in the governmental agenda has reduced the visibility of the need for supportive services on the island. Recent statements by the Minister of Education confirm that there has been insufficient focus on the services catering for special needs persons. There are a limited number of special needs schools, and other services including occupational therapy. The Minister is adamant that special needs will now be placed “on the front burner” (Lord, 2016), as the government makes an effort to improve facilities to cater for those with disabilities.

### **Opportunities for Change in Occupational Therapy Practice**

The four problems described above are not irresolvable. At present, many of the solutions are already underway. The concern of the shortage of therapists is conveniently combatted by the initiation of a local occupational therapy educational program. In September 2019, the very first cohort of nine Master's students are due to graduate from the University of the Southern Caribbean. One year later, a further six students are expected to join the OT profession. There is the potential for the number of practicing therapists to increase from 16 in 2017 to 25 in 2020; a 93% increase.

A sudden increase of occupational therapists in the country warrants the creation of new job posts. The World Health Organization (WHO, 2011) estimates that one in seven people is faced with disability. Further, half of the people faced with disabilities cannot afford health care and healthcare costs can push families affected by disability into poverty. Trinidad and Tobago has a population of 1.4 million citizens. Application of the WHO estimate proposes that 200,000 Trinbagonians have a disability. The 16 therapists in the twin islands cannot feasibility attend to the needs of all of those with disability, and yet there are only two governmental public-sector positions available, both in mental health facilities. Hidden disabilities and the low priority of special needs in the Governmental agenda are assumed to account for such.

Fortunately, societal and governmental opinions are changing. Non-governmental organizations, private institutions and community-based organizations are rallying for the rights and visibility of people with disabilities. This support inspires families to advocate for the inclusion of their loved ones into various activities. Family establishments such as

movie theatres and arcades, and indoor playgrounds now advertise sensory-friendly times and offer their venue for little or no cost to facilitate events for children with special needs. Many awareness campaigns offer families and communities the opportunity to *walk for a cause*, at events that gather thousands and attract the attention of mass and social media, and public figures. Such advocacy goes hand in hand with governmental awareness of the need to address the concerns of families touched by disability.

In 2016, a document entitled the Welch Report was produced by a special committee appointed by the Prime Minister of the Republic of Trinidad and Tobago to review health care delivery by the Regional Health Authorities in Trinidad, and to rationalize the system of public sector doctors in private practice (Government of Trinidad and Tobago, 2016). Within this document, the authors note the “severe shortage of staff” (p. 63) in the allied health professionals. The researchers also note that the Child Development and Behavior Unit at the Eric Williams Medical Sciences Complex has one medical specialist, who is shared with other departments at the hospital. The Report owes such underdevelopment to “bureaucratic delays and non-recognition by the Ministry of Health” (p. 29). Though its findings are somber, governmental initiative to create a committee to investigate the shortcomings of the health care system is a step in the direction of progress.

Other efforts to acknowledge and address the needs of persons with disabilities by government officials include public statements by Ministers. One such example is the statement issued by the Minister of Social Development and Family Services on 3<sup>rd</sup> December 2017, the International Day of Persons with Disabilities. The Honorable

Cherrie-Ann Crichlow-Cockburn acknowledges the Government's Vision 2030 to "leave no one behind" (Trinidad Express, p. 40). The Minister goes on to say that the Ministry is committed the creation of an inclusive society, by ending discrimination and creating opportunities for participation for people with disabilities.

The current social, political, educational and professional trends described above combat the problems facing the expansion of occupational therapy services. Indeed, these trends cannot be taken in isolation. They are not limited to the geographical borders of Trinidad and Tobago, but reflect larger, globalized forces such as international standards within the occupational therapy profession, and health care as a whole. One powerful example is the WHO's (2011) statement that "rehabilitation and assistive devices can enable people with disabilities to be independent". Such examples form the basis of the theoretical framework used to describe the growth of the occupational therapy profession.

### **Theoretical or conceptual framework to understand this problem**

The theory of institutional isomorphism was used to identify the forces affecting occupational therapy development in Trinidad. The model speaks of three forces that cause organizations to become more homogenous: mimetic, coercive and normative. Each of these pressures is identifiable in the current state of occupational therapy service provision in Trinidad and Tobago, as depicted in Figure 2.2, and explained in the paragraphs that follow.

The public healthcare sector was developed in the time of British rule. The public hospital that is the focus of this project, the Eric Williams Medical Sciences Complex (EWMSC), was established just two decades after the nation gained its independence and

shared many traits with the well-established British system. Even today, similar to Great Britain, healthcare remains free of charge for citizens, as the Government finances treatment through taxation and national insurance (Belcon, Ahmed, Younis & Bongyu, 2009). This is an instance of the strong and lasting effects of mimetic forces; the British system provided a model of operation at a time when the newly independent nation was in a state of uncertainty, urgently searching for an example to follow. At present, the EWMSC houses the main pediatric clinic in the country, but does not offer occupational therapy services. The effects of mimetic forces will further come into play in the design of the proposed OT clinic, as examples from well-established clinics abroad will be examined in the hope of proposing a feasible and sustainable initiative.

Coercive forces take effect when considering the intricate position of the nation on the world scale. The Republic of Trinidad and Tobago is developing gradually, avidly searching for First World status. In order to qualify, there are requirements that must be met. These stipulations are largely decided internationally. For example, the Sustainable Development Goals of the United Nations highlight the need to diversify the healthcare system and address needs of persons with disabilities. A document entitled the Seven Interconnected Pillars for Sustainable Development was the product of a collaboration between the Ministry of Planning and the Economy and the United Nations Development Programme (UNDP, 2011). This document cites the medium-term goal of addressing health and hospitals, exploring specialized niches in healthcare and constructing and refurbishing facilities. Although such regulations cannot be mandated, they are strongly advised, and put pressure on the Government to improve services. The provision of

occupational therapy services in the public sector is a step toward meeting these guidelines.

The influence of normative processes is particularly applicable to the project at hand. Prior to September 2016, there were no formal occupational therapy education programs in Trinidad in Tobago, nor the entire Caribbean. As such, all therapists practicing in the country were educated abroad. The proposal of a public-sector clinic locally will inevitably be similar to those abroad, as its design will be determined by professionals who have international training and experience. Further, all pediatric therapists currently practice in clinics that mimic international standards. Additionally, results of the American Occupational Therapy Association's (2010) workforce survey reveal that the majority of occupational therapists in the United States work in hospitals (26.6%) and schools (21.6%), and the minority in the community/other (4.3%) and mental health (2.9%). Whereas in Trinidad, all therapists work in the private sector, with the exception of one, who works at a public sector mental health hospital. There is no representation in schools or non-psychiatric hospitals. The theory of institutional isomorphism will predict that over time, Trinidad's OT workforce will come to mirror that of international bodies, such as the American Association.

The above discussion suggests that *if infant institutions come to resemble well-established ones, then the proposed pediatric occupational therapy clinic in Trinidad and Tobago will be similar to veteran clinics abroad*. It is important to consider the implications of this. As discussed in previous assignments, DiMaggio and Powell's (1983) theory does a fine job at explaining the causes of homogenization but does not

suggest whether such isomorphism is advantageous or disadvantageous. Is an international public-sector design appropriate to the social structure of Trinidad and Tobago? There are important factors, specific to the nation, that need to be considered. One example is the extreme pay discrepancy between public and private sectors, which will hinder many therapists from committing to full-time employment in a Government job. Another, is the difficulty of getting approval for time off from work to take a child to therapy during regular hours. Further is the greater severity of illness in developing countries, which requires long-term care, and will delay discharge. Another issue is the ability of caregivers to carryout home exercise programs. Many families who access public healthcare are of low socio-economic status, which is related to level of education. Home exercise programs are predominantly written and need to be followed precisely for the best results, which may be difficult for some families. All of these factors should be considered in the design of a local clinic. Perhaps in Trinidad and Tobago clinics will be more effective if they were staffed by part-time therapists, had extended and weekend hours, and included rigorous face-to-face parent trainings. Though is it easy to follow a well-established program, one must always bear in mind the motive of the initiative. In this case, the idea is not simply to start a clinic, but to start a clinic that would provide access for a particular cohort. A level of homogeneity is inevitable, beneficial and even necessary, but so is a level of innovation and cultural respect.

### **Previous Attempts to Address the Problem**

Attempts at initiating an occupational therapy department at the Eric Williams Medical Sciences Complex have been made for over ten years, according to the sole

Specialist Behavioral-developmental Pediatrician in the Children's clinic, Dr. Dick (personal communication, November 15, 2016). Dr. Dick has been advocating for the profession within the hospital, and in non-governmental arenas, serving on the board of the Caribbean kids and Families Therapy Organization, a non-profit institution providing occupational therapy to children with disabilities. In 2010, Dr. Dick recalls a glimmer of hope. The North Central Regional Health Authority supported the proposed department, with efforts being made to purchase the needed equipment, and designate a space within hospital walls. A list of needed items was made with the assistance of local and international occupational therapists. At that time, Dr. Cameron from the Occupational Therapy Department at the University of Toronto (personal communication, January 30, 2018) brought groups of OT interns to practice in Trinidad. Cameron, along with her students and local OTs visited the site and made recommendations with regard to the materials and design of the building. Dr. Dick describes the extreme caution made to adhere to Government purchasing rules. Quotes were requested from three companies, and the best price was chosen. In the cases in which there was a single supplier (for example the Peabody Development Motor Scales assessment, PDMS-2; Folio, 2000), documents were obtained from the individual companies, and permission was sought from the Chief of Staff to approve such supplies. Orders exceeding a certain amount had to be accompanied by a Board Note, which justified the expense, and requested permission to purchase.

Efforts were also made to renovate the space, particularly the bathrooms. Drs. Cameron and Dick worked alongside OTs and OT students to design the bathroom using

the American with Disabilities Act (ADA) Standards where appropriate. Renovations were made and materials were purchased, but no therapists were hired. In 2016, Doctor Dick attended meetings with the Chief Executive Officer and Medical Director of the Eric Williams Medical Sciences Complex to discuss how occupational therapists and occupational therapy students would be of value to the hospital. Both Drs. Dick and Cameron recall that subsequent to such meetings, occupational therapy was added to the list of professionals that should be included in hospital staff. Efforts to acquire this list from the hospital, the North Central Regional Health Authority and the Ministry of Health were unsuccessful.

Today, puzzles, assessments, toys and various other manipulatives remain behind a locked door with a paper sign “Occupational Therapy” (Appendix B) that Doctor Dick refuses to remove for fear that its disposal will symbolize the raising of a white flag.

Though no other direct attempts have been made to initiate pediatric occupational therapy in the public sector, the Trinidad and Tobago Occupational Therapy Association (TTOTA) has been advocating for the awareness of the profession within the Government agenda. The Association makes special effort to invite Ministers and relevant officials to events, but as of current, has been met with little support. The most recent awareness campaign took the form of an OT day held at one school in an underserved community to display what occupational therapy intervention in the school system could accomplish. The Ministry of Social Development appointed a representative to attend from an unrelated field, and though the Ministry of Education pledged that 11 members of its Student Support Services Division would attend, none

showed (TTOTA, 2017).

TTOTA has placed on its two-year strategic plan, intentions of advocating effectively and purposefully within the relevant Ministries. In 2016, due to the fall of oil prices internationally, Trinidad and Tobago entered a “deep recession” (Singh, February 26, 2016). Many families suffer the brunt of the recession. With jobs lost and taxation increased, non-essential services, such as occupational therapy are forgone. Private sector OT institutions are indeed feeling the effects of the recession, but therapists are more concerned that their clients will not be able to get the care that they need. Such views were expressed in TTOTA’s Strategic Plan 2018-2019 (November 19, 2017), encouraging members to commit to Government awareness campaigns aimed at incorporating OT into public sector services, which are offered free of charge.

Dr. Dick, Dr. Cameron and the TTOTA have made strides in the campaign for public-sector occupational therapy presence. Such efforts will undoubtedly facilitate the acknowledgement and hopefully, the implementation of the project at hand. Given their dedication to making this project a reality, both Dr. Dick and the TTOTA have been consulted on structure and function of the proposed department, discussed in the next chapter.

## **Conclusion**

Reasons for the lack of pediatric occupational therapy in the public-sector in Trinidad are numerous and fall on the shoulders of multiple stakeholders- Government officials, families of children with disabilities, and therapists themselves. The theory of institutional isomorphism suggests that this concern will be resolved as the healthcare

system in Trinidad gradually begins to mirror that of international countries. Proximity to North America, and an historical relationship with the United Kingdom suggest that practice will develop according to such first world standards. What is unknown is whether the international example will naturally prove relevant to the population of Trinidad and Tobago. It is believed that a conscious effort needs to address culture for Project Kids CLUB to be effective. Previous efforts at confronting the lack of OT have set the stage for the establishment of the clinic. The aim now, is to design and advocate for a program tailored to the needs of the population.

### **Chapter 3- Description of the Project**

Project Kids CLUB takes the form of a program proposal to submit to the Government of Trinidad and Tobago, advocating for pediatric occupational therapy to be implemented in one public hospital. The project took form through both primary and secondary research. Given the lack of occupational therapy research in Trinidad and Tobago in particular, and the Caribbean in general, international studies were sought and reviewed to glean information on the best means of occupational therapy delivery for children in a public-sector domain. To ensure cultural relevance, proposed treatment measures, as well as administrative design were assessed for alignment with national policies on disability and service delivery related to the target population. Such information constituted secondary research.

To demonstrate the demand for occupational therapy (OT) services, a primary research component was included. This took the form of a brief questionnaire that was submitted to the parents/caregivers of children with disabilities in one public sector children's hospital and two private sector occupational therapy clinics in Trinidad. The purpose of this survey was to ascertain whether parents would access OT services offered in the public sector.

#### **Primary Research Findings**

To determine the demand for occupational therapy services in the public-sector feedback from the parents of children with disability was sought. Two parent surveys were devised (see Appendix C). The first was designed for distribution to families in which the affected child was not currently receiving OT, and the second for families

already enrolled in OT privately. The surveys were granted exempt review from the Institutional Review Board (IRB) at Boston University, signifying that they posed minimal risk to the psychological and physical well-being of respondents. The three sites at which the questionnaires were distributed also provided written approval of the study.

Between June and September of 2017, a total of 88 participants completed questionnaires, 48 who were approached at a public sector pediatric waiting room, and 40 of whom currently sought either OT, speech or art therapy privately. The age range of children whose parents completed this questionnaire was 1 year to 15 years, with a mean age of 6.0 years. The child's diagnoses included: Autism Spectrum Disorder, Down's Syndrome, Global Developmental Delay, and learning disability, among others.

Of the 88 participants, 98.8% reported that families would benefit from an occupational therapy department at the EWMS. Figure 3.1 demonstrates that, of the caregivers who wanted their child to receive OT, but who were not currently receiving treatment ( $n=42$ ), 67% of parents cited the cost of service as the main deterrent, and this trend did not differ between public and private sector responders ( $p = .19$ ). Thirty-eight percent of these parents also stated that OT was not currently available in their geographic location.

Parents whose children were receiving OT, and who were approached at private sector clinics were significantly less likely ( $p = .003$ ) to state that they would utilize public sector services than families that were approached at the EWMS. Reasons included inconvenience (33%), satisfaction with current service (40%), and doubting the efficiency (27%) of the proposed department.

Important to note is that of the 48 respondents whose children were not currently receiving occupational therapy intervention, only 27 had been referred to an occupational therapist. The relatively low referral to OT suggests greater need for advocacy and awareness of the benefits of services for children with disabilities, not only among families, but also among referring professionals.

The results of the parent survey indicate that the majority of participants believe that families would benefit from occupational therapy services if they were offered at the EWMSC at Mt. Hope. The most common reason why families did not access occupational therapy was the high cost of treatment, followed by the lack of services in their area.

Concerns with accessing treatment at the EWMSC include questioning the efficiency of public services, inconvenience of the location, and satisfaction with private services. Parent reservations of accessing a public-sector service were taken into consideration when designing the structure of the proposed OT department to ensure efficiency and convenience, on par with private sector services. It is hoped that the information gleaned from these, the most important stakeholders, will encourage Government officials to initiate a public sector pediatric OT program that will allow greater access to services for those who need it the most.

## **The Proposed Department**

### ***Treatment Philosophy***

Pediatric occupational therapy intervention is as diverse as its recipients. Occupational therapists can help children with disabilities to develop a plethora of life

skills. To frame the areas of treatment, pioneer of the STAR Institute for Sensory Processing Disorder, Miller (2011), devised a pyramid (Figure 3:2) that now forms the treatment model of the renowned institution. This pyramid will be used to frame the treatment offered at the proposed public-sector department. Evidence suggests that an improved ability to process and react to sensory input leads to greater occupational performance and adaptive behavior (Schaff & McKeon Nightlinger, 2007). The Star treatment model denotes the interaction among arousal regulation, relationships and engagement and basic sensory functioning as the foundation to addressing higher-level areas of development. It depicts for example the foundation of attention and modulation on a solid sensory base.

The model represents the areas of intervention that will be offered at the public-sector clinic, including sensory processing, fine and gross motor, planning and sequencing, emotional control, executive functioning and social participation. Success the areas shown are associated with “*joie de vivre*” of the treatment recipient. Important to note is the impact of the context and environment in supporting the child’s learning and development. Indeed, parent and family education will play an integral role in a child’s treatment.

Sensory processing has undergone much scrutiny in the past. The phenomenon was first described by Ayres (1963), who termed the condition sensory integration dysfunction. Ayres postulated that concerns in sensory processing resulted in functional deficiencies. In the following decades, many researchers would strive to develop the theory. In 2007, researchers and clinicians addressed the nosology of the condition,

which was consequently renamed sensory processing disorder (Miller, Anzalone, Lane, Cermak &Osten, 2007). Currently, sensory processing remains a highly researched field, with many studies documenting the effectiveness of sensory intervention (e.g. Miller, Coll, & Schoen, 2007; Pfeiffer, Koenig, Kinnealey, Sheppard, & Henderson, 2011).

Although sensory integration theory is an appropriate base for the treatment of children with sensory processing disorders, such as autism, it may not be appropriate for motor-based disorders such as cerebral palsy. The inclusion of the discussion of sensory integration into this doctoral project is not to propose that this be the only frame of reference used in the treatment of children at the proposed clinic, but rather to encourage the use of the bottom-up approach in intervention. The Star treatment model adequately depicts the need to address low level skills before advancing to higher level ones. Remediating low level abilities will form a stable base on which the child is able to grow and develop advanced skill. If high level skills were addressed first, there is a chance that intervention may be specific to one setting and task, rather than generalizable to a wider learning context.

### ***The Clients***

The most suitable clients for the proposed occupational therapy department are children with disabilities, together with their families, that come from low-income households and are unable to access occupational therapy offered at private sector rates. Families who are situated in the vicinity of the hospital and who are unable to travel to and from clinics in other areas will also benefit. In compliance with the Age of Majority Act of 1973, the pediatric clinic will work with children under 18 years. Children with a

range of diagnoses and abilities will be able to attend sessions, limited only by the knowledge and expertise of the treating occupational therapist. Clients are expected to attend at least 85% of scheduled sessions, or risk termination from the program.

Timeliness is expected.

Parent training groups will cater for the parent/caregiver of a child with special needs. Though these trainings will be open to all families, they will particularly appeal to families who cannot attend regular sessions for reasons such as distance or scheduling conflicts. These sessions will cater to one particular diagnosis or phenomenon at a time (e.g. increasing tone, addressing sensory processing concerns). Punctuality is expected.

### ***Work Plan***

The first step to treatment is the assessment. An occupational therapy assessment typically takes two hours maximum for a child. The presence of a caregiver is required to answer questions about the child's condition. The OT will conduct the assessment and provide the family with an evaluation report approximately one-week post assessment, which includes the goals of therapy, and specifics on what is hoped to be achieved before discharge. If the family chooses to receive regular therapy, the OT will provide a list of available appointments. Each occupational therapy session will last 50 minutes. It is the responsibility of the OT to document each session. This written documentation is not usually given to the client, but the OT will provide a progress note on request.

Parent trainings will not include an assessment, but will ask participants to complete a satisfaction survey.

### ***Method of Delivery***

Occupational therapy is premised on the belief that engagement in meaningful activities can assist in the rehabilitation process (Corr, Neill & Turner, 2005).

Occupational therapists use various tasks, depending on the needs of the client to conduct sessions (Canadian Occupational Therapy Association, CAOT; 2002).

The choice of a task begins with an activity analysis. Analyzing activities involves identifying the components of a task that may be used therapeutically (Fidler & Velde, 1999). Occupational therapists look at each component of the task to determine whether rehabilitation, task modification, external supports or special equipment, for example, may lead to increase success and engagement. Occupation-based functional activities are often used for example, a child with limited shoulder flexion, secondary to spasticity, can help to put a cup into a cupboard after mealtime. This task requires:

- Adequate range of motion of the digits to grasp the cup
- Wrist flexion to allow for grip strength
- Elbow and shoulder extension to perform far reaching
- Dynamic standing balance
- Visual motor perception to direct the cup into the space in the cupboard
- Adequate strength to extend the arm and grip the cup against gravity.

Many of these steps are also involved in pure exercise therapy such as using Theraband to perform shoulder extension above the head. Indeed, many times, pure exercise is used in the clinic. However, the use of functional activities such as those involved in self- and

home-care are of utmost importance in living independently and reducing caregiver burden.

### ***Quality Management***

All occupational therapists currently practicing in Trinidad and Tobago were trained abroad and possess either a Bachelor's or a Master's degree in Occupational Therapy. Some therapists may have a Doctorate in the field, but the minimum requirement is a Bachelor's or a Masters. On returning home, therapists are required to register with the Council of Professions Related to Medicine (CPRM). This registration process is intensive and requires proof of Accreditation from the University attended, a police background check and recommendations among other items.

In Trinidad, continuing education units are required of all Occupational Therapists. This can include research into evidence-based intervention, conference attendance, participation in a workshop, or presenting at an academic conference, for example. Registration with CPRM is renewed on a one-year basis and a quota of continuing education units must be met in order to retain one's professional license.

### ***Knowledge Transfer***

In traditional therapy, clients usually attend OT sessions no more than twice per week. In intensive sessions, therapy may be more frequent, but may last a shorter period of time. As such, it is of extreme importance that the therapist educates the client and his/her family on the types of interventions that can be done in environments outside of the clinic. Each occupational therapy session usually ends with a few minutes of talking to the caregiver about what was done in therapy. Further, other methods of knowledge

transfer are common, such as:

- Home Exercise Programs
- School Visits
- Caregiver training
- Home safety evaluations
- Adaptive device/Durable medical equipment recommendation and training.

### ***Time Schedule and Milestones***

The number of occupational therapy sessions varies widely based on diagnosis. Children with involved developmental disabilities usually benefit from lengthened periods of therapy. Children are usually asked to come to therapy once or twice per week for six months, after which a progress report will be done to determine whether further treatment is needed. Other treatment models suggest blocks of intensive therapy. It is not uncommon for children with moderate to severe disability to require years of therapy. However, there are also many mild cases that can be treated in as few as six therapy sessions.

Discharge from occupational therapy is based on the achievement of the goals identified in the initial evaluation. Client or caregiver input is also necessary to determine discharge.

### ***Referrals***

It is predicted that referral to the occupational therapy department will come directly from the adjacent child development clinic. There is one child development specialist pediatrician housed at the complex, as well as many general pediatricians, who

see a range of conditions which require therapeutic intervention. They will act as the major sources of referral.

Referrals will also come from private clinicians who seek affordable options for those clients who cease therapy due to associated costs.

### **Conclusion**

Primary research reveals that parents/caregivers want occupational therapy services at the EWMSC. The greatest benefits of the proposed department include free services and a location outside of the capital. Major deterrents to accessing public-sector therapy include doubting the efficiency of the service, satisfaction with the current therapist, and inconvenience. The design of Project Kids CLUB reflects the demands of the consumer. The OT department will provide quality care, timely appointments, parent/caregiver feedback and a client-centered approach in an effort to satisfy such important stakeholders, and set a standard for the expansion of services.

## **Chapter 4- Evaluation Plan**

This chapter discusses the measures that will be taken to ensure the quality and effectiveness of the proposed occupational therapy pediatric department. The chapter opens with the vision of the department; a clinic a where families most in need of occupational therapy services can bring their children for free, quality evaluation and treatment. It is this vision that sets the tone of the evaluation plan. If we are to ensure that quality services are provided free of charge, then it is necessary to have measures in place to ensure efficient use of resources, a high knowledgebase of clinicians, and a feasible model of best practice. This process cannot occur without the contributions of stakeholders, including the clients and their families, the staff of the department, and Government officials of the larger healthcare system.

Subsections of this chapter include detailed information the program evaluation process, including data gathering, data management plan, and the analysis and reporting of findings. Limitations of the proposed plan are also discussed before the chapter concludes.

### **Vision**

The pediatric occupational therapy department at the EWMSC will be the first of its kind in Trinidad. It is envisioned that this department will provide services for children who currently cannot access therapy due to factors such as the high cost of private sector services, or the relative saturation of services in the capital city. To maintain quality, assess feasibility and assure improvements, program evaluation is

necessary. Further, an evaluation of this program can serve to provide sufficient evidence of the effectiveness of OT to warrant the expansion of services throughout the nation.

### **Evaluability Assessment**

In an attempt to determine whether the workings of the department can indeed be assessed, members of the department, including therapists and administrative staff, parents and families of the children who attend the clinic, Government officials from the Ministry of Health and members of the North Central Regional Health Authority who have meaningful interaction with OT department will be invited to partake. The evaluability assessment will measure the benefits of the OT department for the EWMSC, the quality of life of the children and their families, and the ability of clients to contribute to the productivity of the nation. Relevant documentation will include the National Policy on Persons with Disabilities (Office of the Prime minister, 2006), the mission and vision of the North Central Regional Health Authority, literature on the benefits of occupational therapy intervention for children with special needs, department financial documents, and statistics on the number of client goals achieved.

Compilation of relevant information from each of the aforementioned texts into a compact presentation on the aims of the program evaluation will assist in beginning the conversation among stakeholders. The evaluability assessment meeting will provide stakeholders with the opportunity to reflect on the information presented and suggest modification to the plan. Differences in stakeholder opinions and concerns will be addressed by a facilitator. This meeting will culminate in information on the workings of the OT clinic, and will specifically highlight the areas that can be evaluated to

demonstrate the effectiveness of the department in meeting the needs of children with disabilities and their families.

### **Core Purpose of the Program Evaluation**

Program evaluation for a project of this breadth will be complex and multi-faceted. It will include gathering information on the following:

- Parent satisfaction with services
- Monthly overhead costs
- Quality assurance including therapist registration and continuing education
- Delivery methods such as ensuring client-centered focus, providing feedback to the parents, offering home exercise programs
- Client goal attainment

The collection of such information will assist in justifying the continuation of the program. Information on the effectiveness of OT in increasing the skill set of children with disability will encourage Government officials to invest further in developing and expanding services. Parent satisfaction with treatment will ensure that the department is adequately used. Ensuring quality will assist with meeting international standards, which is grossly important for a developing nation.

The evaluation will be causative in nature, as it will investigate the impact of treatment, and the ingredients of the service that contribute toward program effects (Cooksy, Gill & Kelly, 2001). Various methods of data collection will be used, including questionnaire, standardized assessment, department audit, focus groups and trained observers. Such methods will serve to answer the following research questions:

### **Scope of the Evaluation**

The evaluation will take place one-year post initiation of services, as this will allow sufficient time for client goals to be addressed and met. As the goal of the evaluation is to determine the effectiveness of the program, sampling will be purposeful and specific to those who impact, or are impacted by the workings of the department. The evaluation will require the input of all stakeholders, including the administrative staff, therapists, clients and their families and relevant associated departments, such as the medical staff who refers to the department. All families who began services within the first month of operations will be asked to complete a questionnaire, rating their satisfaction with services. Focus groups of a subset of caregivers (5-10 participants) will also provide a less structured means of receiving feedback. All therapists operating in the department will be asked to complete a questionnaire regarding their agreement with administrative procedures, facilities and equipment. At least two referring practitioners from the adjacent pediatric medical clinic will be asked to complete a survey on the ease of referral and information exchange. Internal audit carried out by human resources personnel will glean information of the qualification of therapists and their continued licensure.

### **Evaluation Questions by Stakeholder Group**

Evaluation questions will be answered by the various stakeholder groups.

*Administrative staff, Government officials and Therapists*

- Do the benefits of occupational therapy for children with special needs outweigh the costs of running the department?

*Clients, Parents/Caregivers and families*

- Are the families of the children who receive treatment at the occupational therapy department at the EWMSC satisfied with the service they are receiving?

*Administrative and Human Resources Staff*

- Are occupational therapists employed at the EWMSC qualified to perform their assigned duties, and are they providing client-centered treatment?

**Research Design**

The program evaluation will reflect a mixed methods design, involving the collection of both quantitative and qualitative data. Quantitative data will include pre- and post- test results of standardized testing of the children receiving occupational therapy intervention to determine progress. Quantitative methods will also be used to determine evaluate administrative procedures, to gather information on parent satisfaction via close-ended questionnaires, and to rate quality of therapy as rated by trained observers. Qualitative measures will include the results of parent focus groups.

**Planned Approach to Data Gathering**

To measure treatment effectiveness, client progress after one-year of therapy will be determined via difference in pre- and post-test scores on standardized and non-standardized measures of development such as the Bruininks-Oseretsky Test of Motor Proficiency 2nd ed. (BOT-2; Bruininks & Bruininks, 2005), the Peabody Developmental Motor Scales (Folio & Fewell, 2000) and the Sensory Profile (Dunn, 1999). Only children who were assessed in the first month after the department was opened will be re-evaluated, as they would have received a year of therapy, which is sufficient time to

reveal progress. Such information will constitute quantitative data.

Other than client goal attainment, quantitative evaluation using descriptive statistics will also include an analysis of administrative processes, such as drop out and cancellation rates, the percentage of sessions begun on time, the number of children on the waiting list and monthly recurring expenses. Such information will be gathered through review of files in the department. Audit of therapist's credentials and compliance with continuing education unit requirements will help to ensure quality.

Parent survey for the purpose of program evaluation will focus on parent satisfaction, or inversely dissatisfaction, with the service provision at the EWMSC. Hearing the point of view of such important stakeholders will assist in improving the service offered and ensuring that the department continues to be in high demand. Parent satisfaction will also serve as evidence for the continuation of the department, and possible expansion of services to other areas of the nation. It will be ideal to have the parent/caregiver of each of the clients to fill out the survey. This will ensure that each family has the opportunity to have their point of view heard. This will inevitably be a convenience sample, as it requires the point of view of a very specific population- the users of the services.

Survey questions will cover issues such as timeliness and consistency of service, openness of the therapist, changes in their child's performance, clarity of home exercise programs, friendliness of the staff and satisfaction with the facilities. Responses will be 5-point Likert-scale ratings ranging from "very dissatisfied" to "very satisfied". In scoring, these verbal ratings will be converted to numbers, with a five on any item

indicating “very satisfied”. Parents will give written consent to participate, and will be asked to complete the survey in the waiting room, while their child is in session. They will be assured of the anonymity of responses. The consent form will also assure parents that their responses to the survey will not affect the quality of service that their child receives.

Qualitative information will also be gathered from parents via focus group discussion. A focus group will provide a non-threatening and permissive arena (Kruger & Casey, 2014) for parents to speak freely of their likes and dislikes with the support of their peers.

Finally, the use of trained observers will be beneficial in ensuring that therapist-child interaction is client-centered, and that adequate feedback is given to the parent or caregiver of the child post session. Observers will be responsible for filling out a form during and after each observed session. This form will comprise yes/no items that are directly observable, such as “Therapist used short, clear instructions to explain the activity to the client.” Given the sensitive nature of pediatric occupational therapy, observers will be employees of the hospital, who are specially trained to observe interaction. At least three sessions per therapist will be rated by two separate trained observers to circumvent the problem of unconscious bias (Levy, Stoney & Aranda, 2015). Results of the questionnaire disseminated as part of this doctoral thesis to investigate the demand for public sector occupational therapy in Trinidad and Tobago revealed that approximately 41% of families who were currently receiving private sector services, and who were approached at a private sector clinic, stated that they would not

access public sector treatment due to concerns with efficiency, satisfaction with services and convenience. It is hoped that the information gleaned from trained observation will provide data to demonstrate the quality and efficiency of services provided in this public-sector department, settling these concerns.

### **Data Management Plan**

The various methods of data collection will result in ordinal (e.g. parent survey, child re-assessment) and ratio (e.g. attendance, expenditure) data. It is necessary for this wealth of data to be properly collected, entered and stored for analysis using statistical software. Surveys will be administered, collected and entered by administrative staff onto a Microsoft Excel spread sheet, which will be shared with evaluators via Google Docs. Another tab on this spreadsheet will be used to note administrative data such as attendance rates, no shows and number of clients seen. Information on recurring expenses will be entered on a separate sheet as well. After data entry, collected surveys will be stored in a labelled folder and kept in a locked filing cabinet on-site. Information from focus groups will be scanned and entered and shared via Google Drive. The individual entering the data will ensure names or identifying information included in the focus group minutes are blanked out before being scanned.

### **Data Analysis and Reporting**

The method of data analysis is dependent on the type of information. Quantitative data analysis will include either parametric or nonparametric methods, depending on whether the distribution is normative or skewed, and whether the data is nominal, ordinal or categorical. Suitable statistical analyses will then be used to determine levels of

significance. Qualitative data, collected for example during focus groups, will be grouped into themes and sub-themes to allow for analysis. Such data will be coded separately by two evaluators to ensure reliability.

The result of all analyses will be collected and reported in an executive summary that will be distributed to all department staff and relevant stakeholders, including the Executive Director and Hospital Administrator of the North Central Regional Health Authority, and referring professionals. To ensure transparency of this Governmental program, a shortened-form of the evaluation report will be made available to the public via the North Central Regional Health Authority's website. This report will take the form of a fact sheet that will demonstrate the benefits of OT for children with disabilities, as well as the plans of the department to continuously improve service delivery and quality. Hard copies of the fact sheet will be posted and distributed at the department as well.

Results will also be compiled into a scientific poster and submitted to various occupational therapy and health-related conferences to demonstrate the importance of public-sector service provision. This will serve as a follow-up to the initial study entitled "Investigating the Demand for Pediatric Occupational Therapy in the Public Sector in Trinidad and Tobago", presented at the Association of Caribbean Occupational Therapists (ACOT) Conference in Jamaica in 2017, and the World Federation of Occupational Therapists (WFOT) Conference in South Africa in 2018.

### **Limitations**

The limitations to the proposed occupational therapy pediatric clinic in the public sector cannot be ignored. Firstly, attendance rates can affect intervention outcomes. If

families are unable to bring their child to regular sessions, it can skew the treatment outcomes. Further, children with severe disabilities may show progress very slowly and may require more than one year for intervention to take effect. This again, can lessen the treatment effects found. Given the impact of effectiveness of intervention data on the longevity of the department, the possibility of poor scores is a limitation, as it may not truly reflect the true impact of occupational therapy.

Further, there is the potential that parent report surveys and focus groups may not reflect the true feelings of families. Though anonymous, there is the potential that caregivers will hesitate to state their true opinions for fear of negatively impacting their child's therapy sessions. Though positive results will benefit the continuation of the department, they will not assist in the improvement of the structure of function of the department.

Lastly, descriptive statistics regarding administrative processes are labor intensive and require data entry and analysis that a receptionist may not be able to complete unassisted. There is a possibility that this data will get lost in the everyday running of the department. To address this, and the other limitations mentioned previously, special care should be taken in the design of the department. All of the aspects described in Chapter 3 should be fully developed to reduce the impact of limitations.

## **Conclusion**

The evaluation process is key to ensuring continued quality, effectiveness and demand for the clinic. Recall that parents/caregivers indicated concerns with efficiency of the department as one of the deterring factors of attending therapy sessions at a public-

sector site. Consistent review of the therapeutic process, and consultation with this stakeholder group will increase the chances that clients continue to utilize the service. Additionally, information regarding the use of services from the administrative point of view will determine if the program is being sufficiently used, and if it is cost-effective to run. Though all efforts will be made to ensure reliable and valid results, it is important to recognize the limitations of evaluating this program, such as the inability to ensure goal achievement with very severe disorders, the risks of self-report surveys, and the intensity of administrative data collection.

## Chapter 5: Funding Plan

*A Proposal for Action* takes the form of a project proposal to submit to the Government of Trinidad and Tobago appealing for the initiation of a pediatric public sector occupational therapy clinic at the Eric Williams Medical Sciences Complex in Mount Hope, Trinidad. Primary data collected as part of this project provides irrefutable evidence that families of children with special needs would benefit from and utilize the proposed clinic.

The Ministry of Health of Trinidad and Tobago offers free healthcare for all, once accessed at public sector institutions. This gratis provision has undoubtedly provided care for many who cannot afford private sector services. Advances in medicine have spurred the international movement in healthcare away from diagnosis and cure and toward rehabilitation, health promotion, and function (Barney & Perkinson, 2016). Whereas common conditions affecting children in the pre-vaccination period included acute and even fatal conditions such as diphtheria, tetanus and pertussis, these conditions are now uncommon in Trinidad and Tobago as inoculations are available- free of cost in the public sector. Today, more common, chronic conditions include obesity, developmental disabilities such as attention-deficit/hyperactivity disorder (ADHD), autism spectrum disorders, cerebral palsy and mental illness (Torpy, Campbell & Glass, 2010). The dominance of these non-life-threatening conditions leads to the question, “what happens to those children who live?” (Swartz & MacLachlan, 2009). In Trinidad and Tobago, though their medical needs may be met in the public sector, children with disabilities do not have access to government-funded rehabilitative services such as occupational

therapy. They live, but can they participate fully in daily life?

The issue of funding is a double-edged sword. If offered publicly, occupational therapy would be free of charge for many families in need. However, who will incur the cost of treatment provision? Traditionally, all costs of public sector health care are absorbed by the Government. Given the volatile economic situation currently plaguing Trinidad and Tobago, secondary to the critical fall in oil prices, the following discussion will detail funding options that can support effective and quality service provision in lieu of full state funding.

The chapter begins with an analysis of local resources, outside of Government funding that can help to offset the financial responsibilities of the state. These include volunteer hours, student internships, and local-business donations. The subsequent section details the projected budget for the first and second year of operations. This section provides categorical information on materials and manpower needed to successfully run the clinic. Potential funding sources are described next. These include funding by foundations, corporate grants, crowd sourcing and virtual fundraising initiatives. The chapter concludes with a summary of information discussed and a hypothesis of the percentage of costs that can reasonably be consistently funded by non-Governmental partners.

### **Available Local Resources**

Local resources can play a key role in the establishment and maintenance of a high-quality clinic and can reduce the cost to the Government. Relevant to the establishment of the clinic, in-kind donations can come from local furniture and

appliance stores. Hardware stores, for example, may be willing to sponsor office furniture and kitchen appliances that can greatly reduce the costs of initial set up. The donation of such resources will be especially valuable as these are long-life materials that will not have to be purchased for years to come once adequately maintained. To incentivize companies to donate materials a “wall of thanks” can be allotted, on which the logos of all companies that have donated will be portrayed. Photo opportunities at the opening of the clinic, or at other special events will give credence to those company’s sense of community and social responsibility.

Given the good relationship among health professionals in Trinidad and Tobago, another local resource can be the in-kind commitment to environmental enhancement by the Art Therapy Association of Trinidad and Tobago. Occupational therapists acknowledge the impact of the environment on the therapeutic process. According to the World Health Organization (WHO, 2001), there are three factors that affect an individual’s participation in activities: the functional skills needed to perform the activity, personal factors such as culture and values, and environmental factors, which can include structural, community and social components. Environment becomes even more important when dealing with children with special needs. For example, children with autism spectrum disorder (ASD) demonstrate improved participation in a sensory environment that is appropriate to their level of arousal (Pfeiffer et al, 2017). Further, psychologists have documented the negative impact of a deprived environment on the ability of the child to learn (Ferguson, Cassells, MacAllister & Evans, 2013). Given such evidence, it is important that the physical environment be designed to suit the needs of a

developing child. Art therapists may be able to help with painting the department. Given their knowledge of the sensory needs of children with disabilities, they can use their professional judgment to create various “zones” throughout the clinic that will appeal varying levels of alertness.

In terms of the maintenance of the everyday operations and quality of the department, volunteers and occupational therapy interns are valuable local resources. Volunteers can include professionals skilled in areas such as web design and statistics, who can assist with upkeep of a website and annual reports. Volunteers may also include kind hearted citizens who simply want to give back to the community. These people can help with waiting room management, guiding parents through the intake process, and assisting the occupational therapist during sessions. Occupational therapy students from the University of the Southern Caribbean, or abroad, will also be valuable. As part of their fieldwork, students can help to improve the quality of the department through special projects such as creating home exercise program handouts, or producing low-technology manipulatives. Early integration of students into the department can also motivate students to work at the department after graduation, ensuring continued staffing.

The final group of local contributors is the occupational therapy community. Occupational therapists who do not work at the hospital can still volunteer their time to run special groups, or one-off training programs. This will allow private practice clinicians the opportunity to support public sector affairs. Such volunteerism will be particularly important during the early stages of the clinic, to avoid burn out of employed

therapists who have to deal with full-caseloads while learning to function in a new setting.

### **Program Implementation Budget**

The expenses need to implement a pediatric public-sector clinic fall into three categories: therapeutic equipment, office supplies and furnishings, and staffing. Each of these will be discussed in turn. Estimated cost of two years of operations is provided in Appendix D.

#### ***Therapeutic equipment***

The minimal equipment needed to begin a pediatric clinic that can treat children of a variety of special needs is listed below. Estimated costs of materials are given in Appendix D.

- Assessment tools: Peabody Developmental Motor Scale (PDMS-2; Foilio, 2000), Bruininks-Oseretsky Test of Motor Proficiency Second edition (BOT-2; Bruininks & Bruininks, 2005), Motor free visual-perception test (Colarusso & Hammill, 2003), Schoodles Pediatric fine motor assessment (PFMA-3; Frank & Wing, 2011), Sensory Processing Measure (Kruegar & Casey, 2014), Developmental Profile (Alpern, Boll & Shearer, 1986), Beery-Buktenica Development Test of Visual-Motor Integration (Beery VMI; Beery & Beery, 2010) , Goal-Oriented Assessment of Lifeskills (Miller & Oakland, 2013) , Social thinking products (e.g. <https://www.socialthinking.com/>)
- Furnishings: Matting for the floor, child-sized tables and chairs, white and black boards, book shelves, cupboards

- Gross motor equipment: tunnel, trampoline, spot markers, staircase, therapy balls, balance board, balance beams, yoga/gross motor cards
- Fine-motor equipment: crayons, color pencils, chalk, scissors, black and white board, paper, lacing activities, beading activities, putty and playdoh, tracing books, handwriting books, copy books, tweezers
- Visual-motor equipment: puzzles, building blocks, dot-to-dot, mazes, find it books
- Self-care equipment: zips, buttons, snaps, clothing, feeding utensils
- Social skills materials: (board) games for all ages
- Sensory-based materials: sensory swings, platform swing, items of various textures e.g. slime, body lotion, shaving cream, rice, beans

It should be noted that equipment of an estimated value of over \$3700.00 (USD) has been purchased by the Government already and is stored in the area that will hopefully house this pediatric clinic (see images in Appendix B). The listed costs are the lowest estimate gleaned by contacting local suppliers for furniture (Courts, Standards, Price Mart) and international suppliers for therapeutic materials (Amazon and South paw), as the researcher was unable to access the confidential pricelist and inventory used by the Government in the purchase of these products eight years prior. Given that space is already allocated, there is no rental cost, and telephone and internet will be shared with the rest of the hospital.

In 2010, during the initial planning stages, the bathroom and toilet areas were also upgraded to ensure accessibility and suitability for children (See images in Appendix B).

The estimate cost of this renovation is unknown.

### ***Staffing***

#### **Secretarial Staff**

The presence of a secretary is necessary in high-volume areas to assist with registering and scheduling clients. A feasible alternative to hiring a new employee is to consider a transfer of an occupational therapy aid from one of the existing mental health occupational therapy departments at St. Ann's Psychiatric hospital, or San Fernando General Hospital. These members of staff are already sensitized to the treatment of people with disabilities and their families and may be very suitable at welcoming families and listening to their concerns.

The proposed job description (Appendix E) for a medical secretary is taken from the Ministry of Health's website, (<http://www.health.gov.tt/images/cms/health-employment/20180124-NCRHA-Medical-Secretary.pdf>) which lists a vacancy at the North Central Regional Health Authority. Due to the sensitive nature of information related to children, it is believed that this description is suitable for a secretary at the proposed occupational therapy clinic.

It is recommended that this position falls within the Grade 24 range, equal to that of a Clerk III (Ministry of Finance, 2017) given the extra requirements and sensitive nature of the position.

#### **Occupational Therapist**

OT sessions in pediatrics are done individually, with the OT seeing one child every hour. All assessments are done on a one-on-one basis. One of the major concerns in

public sector healthcare is the trend of many professionals to seek private means of subsidizing their income, given the lower wages in the public system. This trend is reported among medical doctors in Trinidad and Tobago in the Welch Report (Government of Trinidad and Tobago, 2016). To combat this concern, the Welch Committee proposed a dual configuration (Appendix F), which offers doctors the option of being employed either full time, or part time. Part-time employees are permitted to seek outside employment, whereas full time employees are expected to maintain allegiance solely to the public sector. The authors argue that this suggestion “is fundamentally driven by a quality motive” (p. 11), as it will ensure that public centers are well staffed and eliminate the chances of doctors reducing their public hours to fulfill their private obligations.

Currently, an occupational therapist I position at the North West Regional Health Authority ranks as a Grade 46 position, with a starting base salary of TT \$9,456/ US \$ 1,390, excluding allowances (Ministry of Finance, 2017). It should be noted that salary estimates provided by the Ministry of Finance still reflect 2013 amounts, as negotiations of more current wages have not yet been settled. Proposed salaries for occupational therapists I & II are provided next. These salaries begin at the high end of the Grade 46 range. The justification for this is the labor-intensiveness of pediatric practice, which is absent in adult mental health treatment. Further, occupational therapy education programs in the Caribbean and North America are no longer offered at the Bachelor level, instead requiring Master or Doctoral training. Such intensive education is on par with that of the psychologist at the Child Guidance Clinic, which currently ranks at a range 56 in

Government service (Ministry of Finance, 2017). Altering the job grade can increase the likelihood that therapists will obtain and maintain public-sector positions.

The job description for one of the only two public sector occupational therapy positions available in Trinidad is provided in Appendix G. This description, although designed for a mental health, in-patient population, is non-specific to one population and can easily be altered to apply to pediatric occupational therapists. It is suggested however, that the description is modified to display treatment-specific duties, similar to the job description of psychologists provided on the Ministry of Health's website (<http://www.health.gov.tt/sitepages/default.aspx?id=213>).

It is strongly recommended that pediatric occupational therapists complete no more than six hours of direct client treatment per day to circumvent burn out, and allow time for quality documentation, session planning and maintenance of high treatment standards. The effects of over work are noted to lead to both mental and physical exhaustion, fatigue and reduced tolerance (Kalantari, Kamali, Joolaeem Shafarodi & Rassafiani, 2015). The number of therapists hired will be determined by the number of children on the waiting list. Information from the primary research that took place as part of this project reveals that there is already a great demand for services.

Full Time (40-hour week)

Occupational Therapist I (less than three years' experience): TTD 10,500/month (USD 1544.12), excluding allowances.

Occupational Therapist II (over three years' experience): TTD 11,800/month (USD 1735.29), excluding allowances.

Part-Time (20-hour week)

Occupational Therapist I (less than three years' experience): TTD 5,500/month (USD 808.82), excluding allowances.

Occupational Therapist II (over three years' experience): TTD 7,000/month (USD 1029.41), excluding allowances.

In the initial stages of the clinic, an Occupational Therapy consultant will be needed to spearhead the program development. Duties may include design of documentation templates, parent contracts and consent forms, clinic environmental set-up, home exercise program development, data storage mechanisms, among many other tasks. It is estimated that set-up will require no more than three-months. In the event that the full and part time therapists are new grads, however, the OT consultant may be called upon to provide mentorship on a part-time basis to ensure quality treatment and best practice by assuming the mentor role. Remuneration for this position can take the form of a monthly consultation fee.

**Potential Funding Sources**

The budget outlined in Appendix C highlight the initial expenses of beginning the pediatric clinic at the Eric Williams Medical Sciences Complex. Almost half of the expenses have already been covered in previous attempts at beginning the clinic. Although salaries must be paid by the Government, other funding sources can be obtained to assist with offsetting the cost of materials and equipment. One option is company sponsorship. Large companies such as those in the oil industry and banking may be inclined to donate equipment to the department while receiving positive media

presence in return. Non-profit organizations, such as the Rotary Club may do the same.

Another relatively new option is to begin an online fundraising platform to allow private citizens and well-doers the opportunity to donate to the department. This may be particularly appealing to the West Indian diaspora, who, though no longer resides in the island, may want to give back their home country, and aid in its development. This option can be expanded to include donation of relevant toys and materials in cases where the donor prefers a non-monetary option.

### **Dissemination Budget**

The dissemination budget largely comprises the costs of marketing the proposed pediatric clinic by means of printing flyers, posters and brochures. Such costs will be recurring to ensure the continuation of referrals to the unit. Other dissemination activities such as person-to-person contact have no associated costs. Face-to-face information is very valuable in reaching those potential consumers who have low literacy, or limited access to technology. Digital marketing forums such as Facebook and Instagram have the potential to reach large audiences free of charge. The greatest demand for such services will be to ensure that the content is updated regularly. This does not necessarily require a paid employee, but can be carried out by administrative staff, volunteers, or therapists. Further detail on the dissemination plan is given in Chapter 6. Costs estimates are provided in Appendix H.

### **Conclusion**

The initial investment made by the Government in the development of the pediatric occupational therapy clinic at the Eric Williams Medical Sciences complex was

immense. Not only are there assessment tools and materials, but there is also sufficient, accessible space and partial furnishings. A continuation of such effort is needed to ensure that the energy invested culminates in a strong, quality, functional department, instead of a room full of filing cabinets and untouched goods.

Given the positive attitude that families had toward the initiation of the clinic during the primary research portion of this project, it is likely that many citizens and corporations will want to donate and sponsor the proposed pediatric occupational therapy clinic, quickly reducing the burden on the state. With Government support to adequately staff the clinic, there is no doubt that the children most in need would be able to receive \services readily.

## **Chapter 6: Dissemination Plan**

Project Kids CLUB explores the possibility of initiating a pediatric occupational therapy department in one public hospital in Trinidad. Once begun, this department would have the potential to offer services for families of lower economic status, who simply cannot afford private sector alternatives. The commencement of such a clinic is very much dependent on the buy-in of key audiences, including the Government of Trinidad and Tobago and the families who will utilize the services. The purpose of this chapter is to discuss the methods of increasing awareness of the benefits of occupational therapy for the target audiences, so that project Kids CLUB may be realized.

Integral components of the dissemination plan include: (1) increasing sensitivity to the benefits of occupational therapy for children, (2) utilizing appropriate messengers to further impact advocacy, (3) facilitating both face to face and documented information on the proposed clinic, (4) monitoring the response to dissemination activities and finally, (5) implementing Project Kids CLUB. The dissemination plan which follows was designed to appeal to both primary and secondary target audiences in Trinidad and Tobago to ensure that both are highly impacted and motivated to support the initiation and utilization of the occupational therapy pediatric clinic.

### **Dissemination Goals**

The dissemination plan includes both long-term and short-term goals as follows:

- *Long-term Goal:* Project Kids CLUB will provide a model of pediatric occupational therapy practice that will expand to each Regional Health Authority in Trinidad and Tobago, delivering services for all children and families affected

by disability.

- *Short-term goal:* The dissemination program will provide information to Government officials on the design, structure, costs and benefits of public-sector occupational therapy services to the population and the economy, to promote the development of other clinics throughout the nation.
- *Short-term goal:* The dissemination program will inform Government officials of the importance of increasing the services available for children with disabilities to meet human rights and international standards.
- *Short-term goal:* The dissemination plan will sensitize children and families to the benefits of occupational therapy for children with disabilities.
- *Short-term goal:* To encourage utilization of the clinic, the dissemination plan will inform families of the quality assurance measures taken to increase effectiveness and reliability of services provided.

### **Target Audiences**

The long-term goal of the dissemination project outlines two main components. Firstly, that the Government will initiate occupational therapy services throughout the country, and secondly, that families of children with disabilities will utilize the services offered. This goal encompasses the major audiences targeted. The primary audience includes the Government officials who can influence the establishment of the clinics, while the secondary audience comprises the children and families who will utilize the services.

- *Primary audience:* Government officials targeted to influence the start of Project Kids CLUB will include members of the North Central Regional Health Authority, the governing body of the Eric Williams Medical Sciences Complex. The Chief Executive Officer, the Hospital Administrator and the Director of Human Resources will specifically be addressed during dissemination activities. The achievement of the long-term goal of expanding occupational therapy to all regions, however, will involve officials at a state level, including the Minister of Health and the Permanent Secretary of the Ministry of Health, who can influence policy changes across all Health Authorities. The main focus of the dissemination plan for Project Kids CLUB is the establishment of one OT clinic in a hospital that is already equipped to house the department. However, efforts will be made concurrently to sensitize the Government as a whole on occupational therapy, to begin the conversation about intervention on a widespread level, in preparation for the establishment of other clinics.
- *Secondary audience:* Children with disabilities and their families comprise the secondary audience. Once the clinic is initiated, its longevity will be greatly dependent on the demand for services. As part of the primary research component of this doctoral project, parents of children with disabilities were asked whether they think families would benefit from an occupational therapy clinic at the Mt. Hope Children's Hospital: an overwhelming majority said "yes". A further question asked if families would access occupational therapy at that Hospital, if the department was established: families who received therapy privately were less

likely to agree, stating reasons such as inefficiency of services. Yet another question asked if families were referred to an occupational therapist, of which only about half said “yes”. The results of this study provide valuable information for the focus of the dissemination program. Firstly, the program, though not yet started, is already in demand, which can be used to incentivize the Government to cater to the needs of the population. Secondly, dissemination materials must demonstrate the efforts do the department to maintain high quality and efficiency, so that prospective users are not deterred by perceived Government inefficiencies. Third, dissemination material should be aimed to empowering families to seek services for themselves, in the case that a doctor does not provide referral.

### **Key Messages**

Key messages of the benefits and value of occupational therapy in a public-sector pediatric setting are described according to the target audience:

- *For the primary audience (Government officials):*
  1. Children with developmental disabilities have difficulty in accessing healthcare services (Cheak-Zamora & Thullen, 2017). In Trinidad, though their primary medical needs may be met in the public-sector, there are no provisions for allied health services such as occupational therapy. Such services can greatly influence quality of life, well-being and productivity. Occupational therapy in particular, can help children and families to enhance growth and development, promote inclusive environments, increase participation in daily routines, improve academic skills and

transition from schools to workplaces, among many other possibilities (AOTA, 2016).

2. Occupational therapists are well-positioned to play an integral role in preparing children for post-secondary education, work and community life (Daoud & Daffner, 2000). Such preparation can allow people with disabilities, who would be otherwise financially dependent, to perform a productive role in society. This would reduce the strain on the Government to provide social services and supports for those young adults who have the capacity and skillset to provide for themselves. Early Governmental investment can lead to greater returns.
3. In 1989, Trinidad and Tobago ratified the United Nation's Convention on the Rights of the Child. This document states that children with disabilities have the right to special care and support, and that all children have the right to good quality health care. The website of the Children's Authority of Trinidad and Tobago (<http://www.ttchildren.org/services/advocacy>) provides a list of other children's rights conventions that the nation has signed, including the United Nations Development Programme's Millennium Development Goals (2003) and UNICEF's A World Fit for Children (2002). In establishing an occupational therapy clinic, the Government of Trinidad and Tobago will be taking a giant leap along the path to fulfilling the goals agreed to many years ago.
  - *For the secondary audience (children with special needs and their families):*

1. The everyday life of a child with disability and his or her family is overwhelmed by challenges. Children with disability often cannot access public spaces such as schools and playgrounds or may be reliant on family members for all daily activities. This can be a strain on family members, and a disadvantage to the child.
2. Occupational therapy provided in the public-sector is offered at no cost to families. This free service can help children with disabilities and their families explore ways of learning new skills and changing their environment so that the child can take part in daily tasks. In some cases, occupational therapists may even help the child become fully independent for certain tasks, such as eating or dressing, which can greatly reduce the responsibility placed on the parent.
3. The occupational therapy model used at the Eric Williams Medical Sciences Complex holds quality and efficiency in high regard. The department promises on-time, regular sessions, carried out by registered, consistent therapists, who are trained in pediatric intervention. Sessions are scheduled in advance, to give parents the opportunity to plan ahead. Sessions are also provided intensively to maximize learning. Parents are invited to observe each session and are allowed five to ten minutes after each session to ask questions about the interventions. Therapists will provide information to parents on activities, equipment and modifications that they can use in their own homes to encourage carry-over of learnings.

## **Messengers**

### *Messengers for Government officials*

- Dr. Natalie Dick is a Specialist Developmental-Behavioral Pediatrician at the North Central Regional Health Authority (NCRHA). She is the only developmental pediatrician currently employed at the Eric Williams Medical Sciences Complex, the proposed site of CLUB Kids. Dr. Dick has been advocating for the inclusion of occupational therapy services into the public sector for over a decade, and still has not given up hope. She sits on the board of the Caribbean Kids and Families Therapy Organisation (CKFTO), which is a non-profit clinic providing reduced-cost therapy for children with disabilities. Dr. Dick is a respected member of the NCRHA and is perfectly positioned to understand the difficulties of accessing private services and the feasibility of providing public-sector care.
- Dr. Debra Cameron is an Assistant Professor and International Fieldwork Coordinator in the Department of Occupational Therapy and Occupational Science at the University of Toronto. Dr. Cameron has brought occupational therapy students from the University of Toronto to complete their fieldwork requirements at a special needs school in Trinidad for many years. During her visits, she has collaborated with the Trinidad and Tobago Occupational Therapy Association and Dr. Dick to discuss the importance of creating public-sector occupational therapy provisions. Dr. Cameron played an integral role in suggesting the type of equipment that would be suitable for a pediatric clinic, as

well as the needed renovations at the time when the NCRHA was considering opening the department. She advocates for public-sector services, a client-centered approach, and quality care.

*Messengers for Children with Special Needs and their Families*

- Possibly the best way of assuring children and families that occupational therapy is indeed effective is through the use of lived experiences. The families that have received occupational therapy, or the children themselves, would be able to speak of the progresses, the challenges, and the realities of dealing with, and treating disability. The intention would not be for children and families to speak only of the benefits of OT, but to also talk about the difficulties, for example, the effort of making it to regular sessions amidst all other responsibilities. Service-users can provide valuable information to potential clients, as well truly empathetic support and advice.

**Dissemination Activities**

As the primary goal is to establish a public-sector pediatric clinic, the priority of the dissemination plan is to appeal to the primary audience- Government officials. This can be done through multiple means, all of which aim to advocate for the profession, share the benefits for the pediatric population and the economy, and examine the alignment between the establishment of the clinic and the achievement of international standards. This document constitutes the written proposal that will be taken to the North Central Regional Health Authority and the Ministry of Health. It provides written information on important factors such as the budget, staffing, and equipment needed. It also provides a wealth of information on the benefits of OT for children and families and

the country as a whole. An added benefit of this project is that it demonstrates the demand for public-sector occupational therapy services, which can be used to assure decision-makers that the investment will be well utilized. Additional written information includes a Fact Sheet on occupational therapy, that will be much less cumbersome, and easily distributable. This Fact Sheet will provide basic information on occupational therapy, the availability of services in the country, and the demand for pediatric public-sector intervention. This information can be used to attract a wider range of Ministerial employees, who may not have need for the proposal in its entirety.

Person-to-person contact is expected to be the most influential form of dissemination. Planned meetings with both the Regional Health Authority and the Ministry of Health will aid in demonstrating the demand for services, and the feasibility of beginning such a program, especially given the headway that has already been made. Such meetings will be a forum to discuss not only the benefits of beginning a clinic at this site, but also other in locations and other fields of practice, such as adult physical disability. It is expected that support during such meetings will be provided by the Trinidad and Tobago Occupational Therapy Association, and the Faculty and students at the University of the Southern Caribbean, which have an invested interest in the creation of jobs and the expansion of opportunities.

Technology can be used in the design of healthcare facilities to match the needs of the consumers with those of the decision-makers (Van Hoof & Verkerk, 2013). In the case of an occupational therapy pediatric clinic, Government officials may not be able to visualize or rationalize the suggested set-up and may benefit from a visual representation

of the unit. This can be achieved through the use of design software. Digital representation of the unit can also be used later on as a model in the establishment of future locations.

Dissemination activities for children and their families will also be carried out through written information, electronic media, and person-to-person contact. Brochures, flyers and posters can be an effective source of information. Positioned correctly, for example, in the waiting room in pediatric medical offices and societies for person with disability, such information can be rapidly disseminated to the target population.

Families themselves are an excellent example of person-to-person information sharing. The community of families with children with disabilities is close-knit, with parents communicating with and supporting one another through many outlets, such as disability awareness events, parent trainings, or even waiting rooms. Once a handful of parents become aware of the provision of free services, word of mouth will aid in dissemination. Other person-to-person methods include offering monthly family workshops that are open to the public, and offering “open houses”, for families to get a tour of the facility and to learn more about OT. Person-to-person information will be particularly useful in reaching those families affected by low literacy.

Electronic media will play an important role in disseminating information on a continuous basis. Establishing and updating a website, Facebook and Instagram page will allow families to learn more about the department simply by clicking. The option of booking and scheduling appointments on-line will also improve the efficiency of the unit.

With informed consent, videography of children in therapy sessions can encourage families to access therapy for their children.

### **Budget**

The dissemination plan detailed above employs a number of strategies that require time, rather than money. Person-to-person meetings carried out by the researcher, members of the Trinidad and Tobago Occupational Therapy Association, and occupational therapy students will not be reimbursed, but rely on the dedication of members to their profession. The largest cost will involve printing the flyers, brochures and posters necessary for dissemination to the target audiences. Estimations of costs are provided in Chapter 5. A table of dissemination costs is provided in Appendix H.

### **Evaluation**

The evaluation of the dissemination plan will be heavily based on the responses of the primary and secondary audiences to the idea of Project Kids CLUB. Such responses include:

#### *Government officials:*

- Government awareness of occupational therapy and the space available for its establishment in the public sector
- Willingness of Government officials to engage in meetings to discuss the proposed project
- Initiation of a plan of action to establish the department
- Hiring of staff
- Opening of the unit

*Children with disabilities and their families:*

- Awareness of occupational therapy and its benefits for children with disabilities
- Awareness of the public-sector clinic
- Visits to the department/social media sites
- Requests for further information on services offered
- Appointments booked

**Conclusion**

Occupational therapy in Trinidad and Tobago is a developing profession, critically underrepresented in the public-sector. That there is space and preliminary resources at the North Central Regional Health Authority suited for the establishment of a pediatric OT clinic is testament to the fact that the primary audience (Government officials) understood years ago, the meaning of occupational therapy and the value in investing in the profession. The purpose of this dissemination plan is to inform current decision-makers of the role of OT and remind them of the effort that began quite possibly before their time in the public-sector. Dissemination efforts will send a message of the benefits of occupational therapy for the children and families of this nation, for the economy, and for development.

Dissemination activities also target the potential users of the service- children with disabilities and their families. Media and materials will aim to establish occupational therapy as household vocabulary, so that all families will know the benefits of intervention for their child. Efforts will also provide information on accessing the clinic and make it simple to book an appointment with a therapist.

Dissemination efforts will be carried out consistently to provide information to as many families in need and to ensure adequate utilization of the unit.

## **Chapter 7: Conclusion**

The Center for Learning and Understanding Behavior, Kids CLUB is an effort at establishing occupational therapy pediatric services in Trinidad and Tobago. Realization of this project would mean that families that cannot afford private services would still have the opportunity to provide their children with treatment that can help them to participate, engage and function optimally in their daily tasks.

From an historic context, the public-sector healthcare system in Trinidad and Tobago was developed based on that of Great Britain. The theory of institutional isomorphism (DiMaggio & Powell, 1983) suggests that such homogeneity is inevitable. Today, in the post-colonial Republic, Great Britain is not the only source of influence on Trinidad and Tobago. Its proximity to North America increases the likelihood that the healthcare system will be influenced by those nations as well. Locally, as occupational therapy develops and as families and the Government come to advocate for the needs of children with disabilities, the demand for OT services is increasing. Project Kids CLUB proposes a system on par with international standards but catered to the unique culture of Trinidad.

Information gleaned through primary research reveals that parents believe that public-sector OT services will be valuable to families in Trinidad. Offered at the EWMSC, such services will cater for those families outside of the capital, that necessitate services free of charge. Program design aims to quell concerns of inefficiency and inconvenience of a public-sector unit.

Previous attempts to address the lack of OT have resulted in the designation of

space and the purchase of materials specifically for this therapy. Many expenses, therefore have already been covered, which puts less strain on the current Government to furnish the unit. Options of both part-time and full-time positions can incentivize therapists to fill public-sector posts, and volunteers can prove valuable in day to day operations.

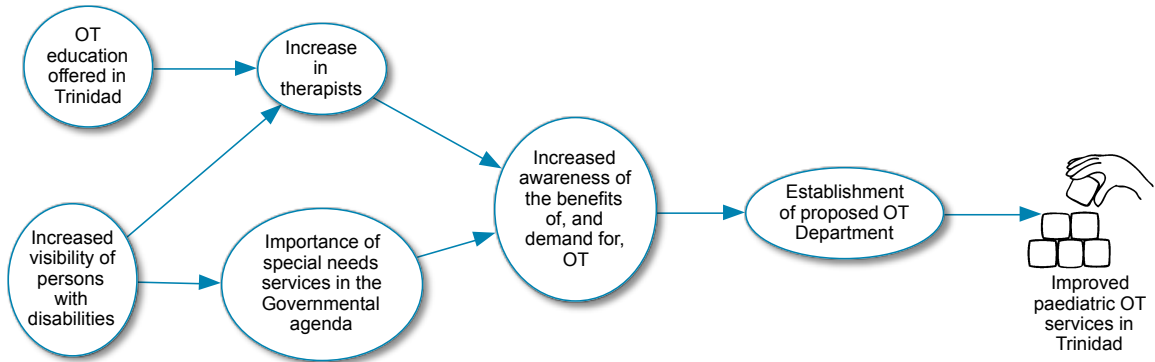
A dissemination plan individualized to the political and social climate of Trinidad can aid in advocating for the establishment of Project Kids CLUB, and the continued utilization of the unit. The dissemination costs are minimal in the digital world of today.

This doctoral project demonstrates the demand for and advantage of occupational therapy services in the public-sector in Trinidad. Its establishment will benefit, families, the Government and therapists alike. Families will be able to provide services without having to pay steep private sector prices. They will learn ways to advocate for their child, address behaviors and change their environment to increase their child's independence, wellbeing and happiness. The Government will meet the demand of the population, boost standards of healthcare in the nation, and provide early investment in children with disabilities, that can reduce state support later on. Occupational therapists will increase their visibility in the public-sector and be able to serve those families most in need.

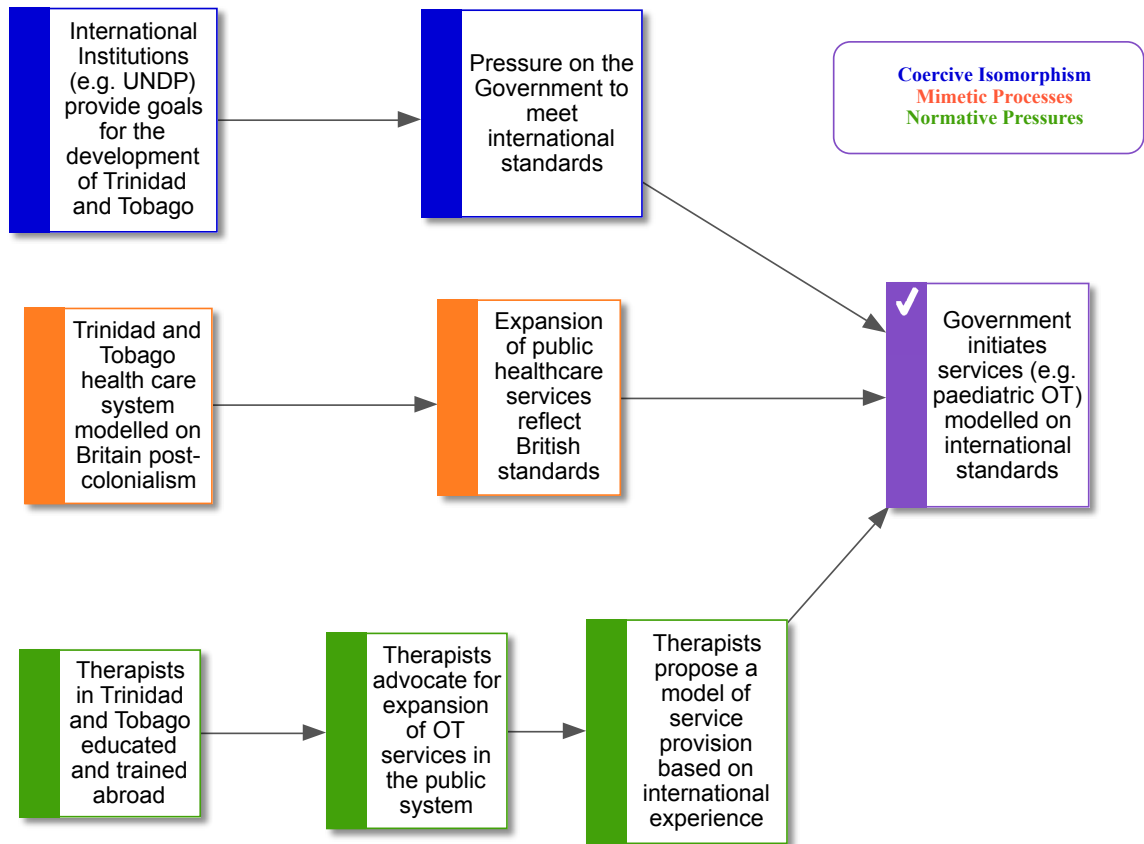
This project is a written document, that if fulfilled, has the possibility of changing the face of healthcare for the most vulnerable population- children with disabilities. Internationally, there is a movement to provide not only medical treatment, but also services that can aid in well-being and quality of life. Occupational therapy is one of these services. Implemented correctly, Project Kids CLUB can assist the Government in

developing the healthcare system of Trinidad and Tobago, increase the reach and influence of occupational therapy, and offer a beacon of hope for children with disabilities and their families.

## Figures



*Figure 2.1.* Model of the Problem. An increase in the visibility of persons with disabilities, number of therapists, importance of special needs in the Governmental agenda, and the offering of an OT education program will all increase awareness of occupational therapy. Increased awareness will support the establishment of an OT department in the public-sector, which will improve paediatric OT services in Trinidad.



*Figure 2.2.* Model of the Conceptual Framework. Application of the theory of institutional isomorphism to the Trinidad and Tobago healthcare system suggests that coercive, mimetic and normative forces will lead the Government to establish occupational therapy paediatric services which reflect international standards.

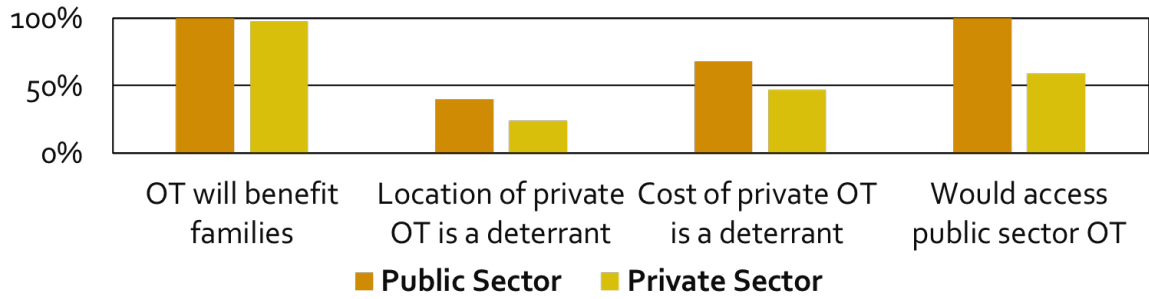


Figure 3.1. Comparison of Public and private sector responses. The majority of parents in both the public and private sector believed that occupational therapy offered at the EWMSD would benefit families. Families approached at both the public and private sector stated that cost and location were deterrents to accessing private therapy. Families approached at the public-sector were significantly more likely to state that they would utilize public-sector services that families approached at private therapy clinics.

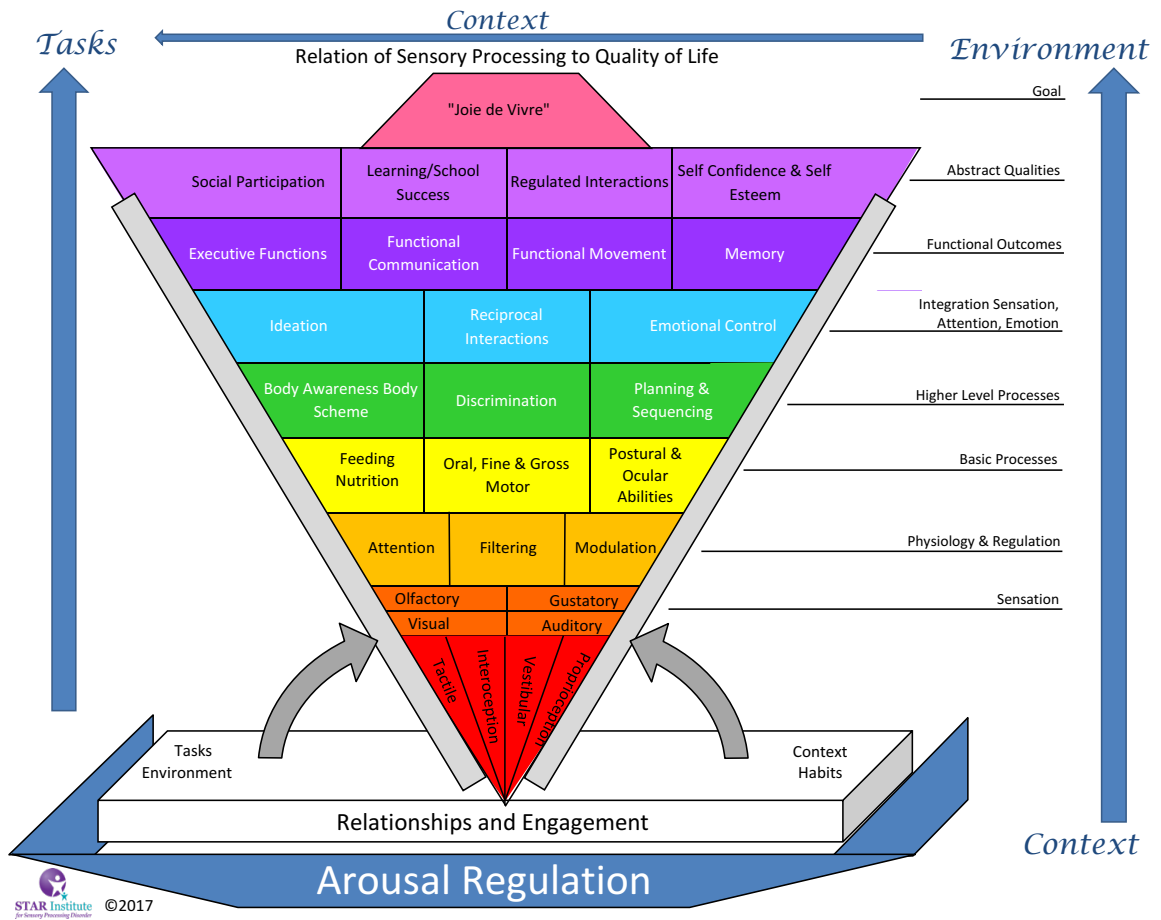
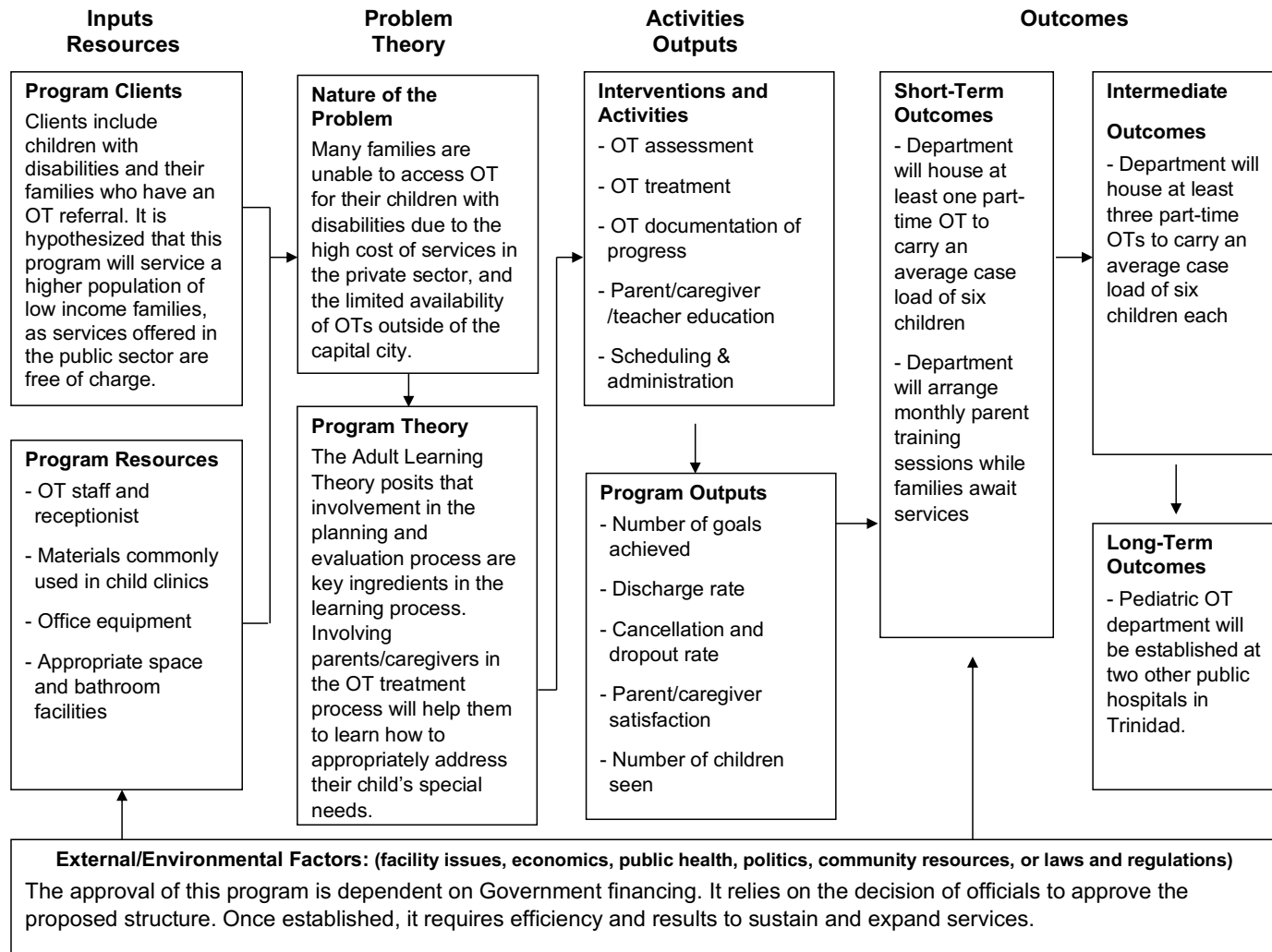


Figure 3.2. Star treatment model. This treatment model depicts the importance of arousal regulation, relationships and engagement and intact sensory functioning as the foundation of higher-level processes.

## Appendix A: Logic Model

### Program Title: Occupational Therapy Department at the EWMSC



**Appendix B**

Images of the Proposed Site of the Occupational Therapy Pediatric Clinic



*Proposed site of the OT gym*



*Ceiling fitted for suspension*



*Post-it placed in 2010 still says OT*



*One-way mirror perfect for teaching*



*Pantry available for feeding therapy*



*Accessible shower*



*Child-sized accessible toilet*



*Large waiting room*



*Unused supplies 1*



*Unused supplies 2*



*Unused supplies 3*

## Appendix C

### Parent Survey: *Children who do not receive OT*

Dear Parent/Caregiver:

The purpose of this survey is to find out if families would access Occupational Therapy (OT) services, in the public sector, if they were available at the Pediatric Department, Eric Williams Medical Sciences Complex (EWMSC).

Occupational therapy is the use of activities to help people with injury or disability to function optimally in daily life. Occupational therapists help children with special needs to improve their skills in a variety of areas including self-care, gross and fine-motor coordination, social skills, attention, concentration and other areas of self-regulation.

Kindly assist in filling out the following form. Please note that all answers are anonymous. Thank you for your time.

---

**Child's age:**

**Child's diagnosis:**

\_\_\_\_\_

\_\_\_\_\_

**1. Was occupational therapy recommended for your child?**

Yes

No

**2. Would you like your child to receive occupational therapy?**

Yes

No

**3. Are there any reasons why your child would not attend OT sessions? If not, please leave blank**

Service unavailable in my area

High cost of service

I don't think it would help my child

I don't have time to take my child to therapy

Other: \_\_\_\_\_

**4. Do you think families would benefit from OT services were they available at the Paediatric Dep't EWMSC?**

Yes

No

**5. Does your child receive any other therapy listed below?**

- |  |  |
|--|--|
| <input type="radio"/> Behavior therapy | <input type="radio"/> Art therapy        |
| <input type="radio"/> Speech therapy   | <input type="radio"/> Medication therapy |
| <input type="radio"/> Physical therapy | <input type="radio"/> Music therapy      |

Parent Survey: *Children who receive OT*

Dear Parent/Caregiver:

The purpose of this survey is to find out if families would access Occupational Therapy (OT) services, in the public sector, if they were available at the Pediatric Department, Eric Williams Medical Sciences Complex (EWMSC).

Occupational therapy is the use of activities to help people with injury or disability to function optimally in daily life. Occupational therapists help children with special needs to improve their skills in a variety of areas including self-care, gross and fine-motor coordination, social skills, attention, concentration and other areas of self-regulation.

Kindly assist in filling out the following form. Please note that all answers are anonymous. Thank you for your time.

---

**Child's age:**

**Child's diagnosis:**

\_\_\_\_\_

\_\_\_\_\_

**1. Do you think families would benefit from OT services were they available at the Paediatric Dep't EWMSC?**

- |                           |                          |
|---------------------------|--------------------------|
| <input type="radio"/> Yes | <input type="radio"/> No |
|---------------------------|--------------------------|

**2. Would you access occupational therapy for your child if it were offered at the Paediatric Dep't EWMSC?**

**If yes, please indicate why:**

- |   |  |
|---|--|
| <input type="radio"/> Convenient location             | <input type="radio"/> Will be close to my Pediatrician |
| <input type="radio"/> Will be provided free of charge | <input type="radio"/> Other: _____                     |

**If no, please indicate why not:**

- |   |   |
|---|---|
| <input type="radio"/> Inconvenient location                               | <input type="radio"/> I am very satisfied with my current service |
| <input type="radio"/> Concerned about the efficiency of service provision | <input type="radio"/> Other: _____                                |

**3. Does your child receive any other therapy listed below?**

- Behavior therapy
- Speech therapy
- Physical therapy
- Art therapy
- Medication therapy
- Music therapy

### Appendix D

#### Estimated Costs of OT Clinic



<b>Therapeutic Equipment</b>	<b>Quantity</b>	<b>Cost per unit</b>	<b>Already Purchased</b>	<b>Year 1 Cost</b>	<b>Year 2 Cost</b>
<b>Assessment Tools</b>					
Beery- Buktenica Developmental Test of Visual-Motor Integration	1	154.95	154.95	0	0
Peabody Developmental Motor Scales	1	557	557	0	0
Motor-Free Visual Perception Test	1	175	175	0	0
Schoodles Pediatric Fine Motor Assessment	1	100	100	0	0
Sensory Processing Measure	1	339		339	0
Bruininks-Oseretsky Test of Motor Proficiency	1	933.9	933.9	0	0
Developmental Profile	1	286		286	0
Goal-Oriented Assessment of Lifeskills	1	371		371	0
Social Thinking Curriculum (We Thinkers and Zones of Regulation)	1	202.98		202.98	0
<b>Furnishings</b>					
Floor (gymnastics) mats	5	149.99		749.95	0
child sized table and chairs	2	79.99		159.98	0
white board	1	7.49		7.49	0
black board	1	11.99		11.99	0
book shelf	1	35		35	0
cupboard	1	100		100	0
<b>Gross motor</b>					
tunnel	1	15		15	0
trampoline	1	70		70	0
spot markers	1	15		15	0
scooter board	1	17		17	0
therapy balls	4	16		64	0

balance beam	1	58		58	0
balance board	1	12		12	0
yoga/gross motor cards	1	15		15	0
<b>Fine-motor</b>					
crayons (152-piece)	1	12.97		12.97	0
colored pencils (64 piece)	1	6.71		6.71	0
chalk	2	4.57		9.14	9.14
scissors (set of 12)	1	9.87		9.87	0
putty	5	16.41	82.05	0	0
playdough (set of 10)	5	7.99		7.99	0
activity books (set of five)	5	9.95		49.75	49.75
paper	10	32.45		32.45	32.45
lacing games	2	9.99		19.98	0
beading games	2	15.97	31.94	0	0
copy books (set of 12)	2	5		10	10
tweezers (set of twelve	1	9.19		9.19	0
paints	5	11.99	59.95	0	0
<b>Visual-motor</b>					
puzzles- wooden	4	19.99	79.96	0	0
puzzles-jig saw	4	10		40	0
building blocks- large	1	14.89		14.89	0
building blocks- small	1	29.87		29.87	0
<b>Self-care</b>					
dressings board	1	18.6		18.6	0
spoons and forks (set of 16)	1	2.06		2.06	0
cup, bowl and plate (set of 16)	1	14.7		14.7	0
straws (pack of 100)	1	6.99		6.99	6.99
<b>Social Skills</b>					
board games	5	20		100	0
timers	2	21.32	42.64	0	0
<b>Sensory</b>					
platform swing	1	219		219	0

	sling swing	1	217		217	0
	bolster swing	1	265		265	0
	trapeze bar	1	62		62	0
	slime	4	15.01	60.04	0	0
	sand	4	15.99	63.96	0	0
	rice	2	2		2	2
	beans	2	2		2	2
	shaving cream (pack of 6)	1	11.23		11.23	11.23
<b>Office supplies and furnishings</b>						
	Desks	3	150	450	0	0
	Office chairs	4	88.23	352	0	0
	Filing cabinets	4	150	600	0	0
	Computers	3	600		600	0
	Internet		0		0	0
	Stationery		50	50	0	0
	Waiting room seats	4	0		0	0
	Printers	1	264		264	80
	Telephones	3	0		0	0
	Microwave	1	130		130	0
	Refrigerator	1	800		800	0
<b>Equipment TOTAL</b>				<b>3793.39</b>	<b>5496.78</b>	<b>203.56</b>
<b>Staffing</b>						
	Full-time OT II	1	20823.53		20823.50	20823.50
	Part-time OT I	2	9705.88		19411.76	19411.76
	Receptionist	1	10778.82		10778.82	10778.82
	<b>Staff Total</b>				<b>51014.08</b>	<b>51014.08</b>
<b>Equipment &amp; Staffing TOTAL</b>					<b>56520.86</b>	<b>51217.64</b>
<b>Dissemination</b>						
	Brochures and flyers	500	.68		337.79	337.79
	<b>Dissemination Total</b>				<b>337.79</b>	<b>337.79</b>
<b>Dissemination, Equipment and Staffing TOTAL</b>					<b>56858.65</b>	<b>51555.43</b>

## Appendix E

### Job Description of a Medical Secretary at the NCRHA, Trinidad

### Internal Vacancy

Applications are invited from suitably qualified persons to fill the following position at the North-Central Regional Health Authority (NCRHA).

### MEDICAL SECRETARY

The incumbent will be responsible for performing administrative and secretarial duties. Also, to exercise wide latitude and discretionary action in the handling of material that may be of a confidential nature on own initiative.

**Main Responsibilities:**

- Transcribes dictated/written medical documents.
- Prepares confidential and special reports that may require considerable independent initiative and action to achieve desired results and conclusions.
- Maintains files, records or correspondence and other matters; ensuring that appropriate copies are distributed, information assembled and corporate personnel notified.
- Develops and maintains a system for easy storage and retrieval of written material.
- Maintains staff files and confidential files as required.
- Performs related medical secretarial duties as assigned.
- Performs in accordance with established standards relating to quality deadlines and meetings.
- Ensures that all patient information is treated with the highest level of confidentiality.
- Performs other related duties as directed by the organisational relationship.

**Minimum Qualifications, Training and Experience:**

- Minimum of five (5) CXC O'level passes; two (2) of which must be English Language and Mathematics or Principles of Accounts.
- Certificate or Diploma in Medical Terminology.
- Certification in Microsoft Office.
- Certification in Human Biology would be an asset.
- Minimum of three (3) years experience in the secretarial field.
- Minimum of two (2) years experience in Medical/Office Administration.
- Any other combination of qualifications, training and experience may be considered.

Certificates acquired at foreign universities **MUST** be supported by **certified** transcripts as well as evidence that the completed programme is accredited in Trinidad and Tobago.

*Applications must be submitted along with Curriculum Vitae and copies of certificates by **January 26, 2018** to:*

**Office of the General Manager, Human Resources  
North-Central Regional Health Authority  
Building # 39, Third Floor  
Eric Williams Medical Sciences Complex  
Champs Fleurs**

***Unsuitable/late applications will not be acknowledged.***

## Appendix F

Proposed Configuration for Medical Doctors in the Public Sector in Trinidad and Tobago  
(Welch Committee, 2016)

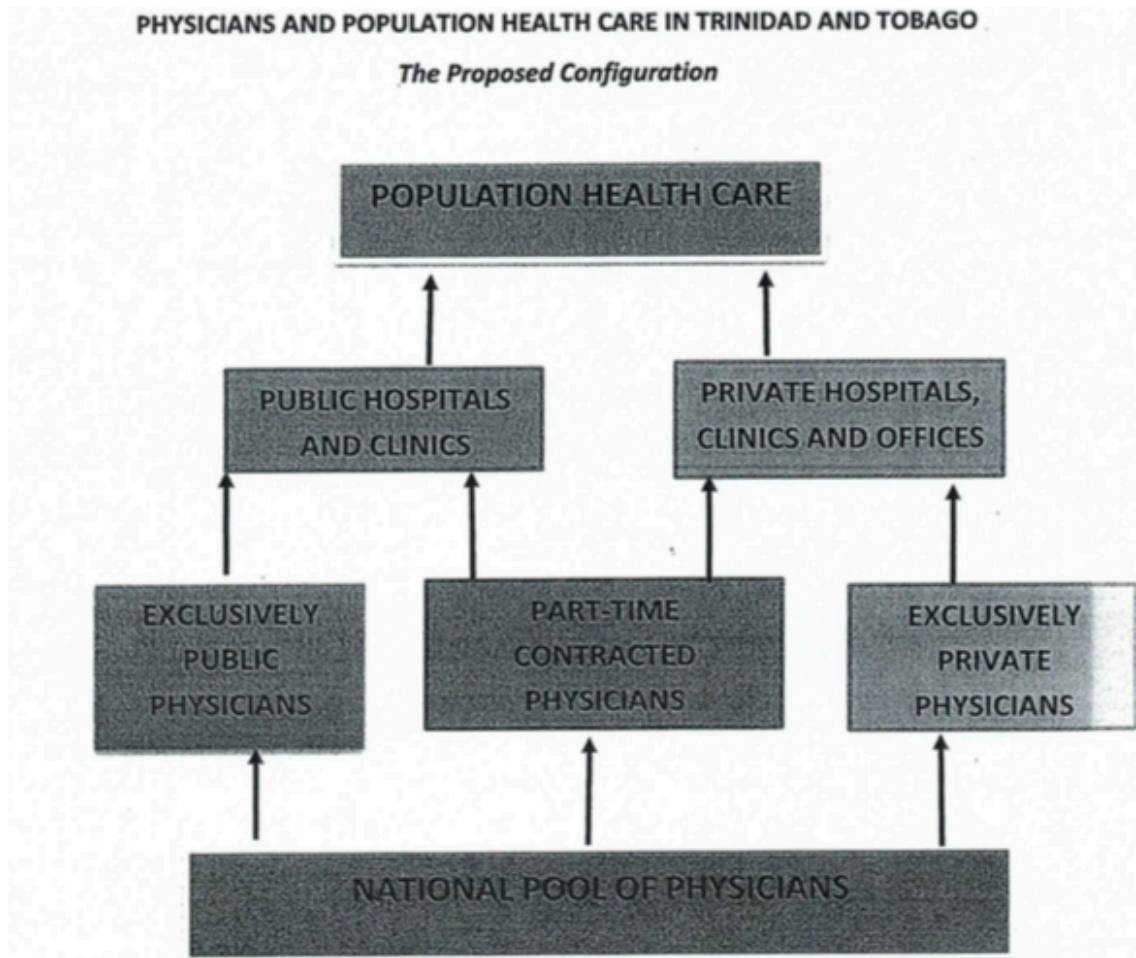


Figure 1

What the diagram portrays is a system that is fundamentally driven by a quality motive. The goal of the system is to be a world class public health system, thereby making itself attractive to practitioners from any part of the globe. Moreover, although, it is acknowledged that the specialists in this system will have to be compensated handsomely, this issue is not really about compensation. It is about a culture of excellence which the system seeks to inculcate. To make the case that because of the current economic restrictions we should not seek to bring this new system on board is to misunderstand how central the branding of the system is to those in charge of it, and how important changing the culture of patient care is to the population of this country. With the significant investments being made in the Trinidad and Tobago health system, having a world class quality brand should be our main objective. The benefits to the population will be tremendous.

## Appendix G

### Occupational Therapy Public-sector Job Description

<b>NORTH WEST REGIONAL HEALTH AUTHORITY</b>			
<b>JOB DESCRIPTION</b>			
<b>JOB TITLE: OCCUPATIONAL THERAPIST 2</b>			
<b>DIVISION</b>	<b>DEPARTMENT</b> Ministry of Health	<b>SECTION</b>	<b>UNIT</b>
<b>GEOGRAPHIC LOCATION</b> St. Ann's Hospital		<b>TITLE OF IMMEDIATE SUPERVISOR</b> Hospital Psychiatric Director	
<p><b>1. <u>MANDATE</u></b> To plan, coordinate, develop, supervise and administer the Occupational Therapy Department and activities so as to ensure the achievement of established departmental goals and objectives as well as the full and comprehensive rehabilitation of patients.</p>			
<p><b>2. <u>KEY FUNCTIONS</u></b></p> <ul style="list-style-type: none"> <li>a. Administration of the Occupational Therapy Department</li> <li>b. Supervision of Occupational Therapists and various other categories of staff within the Department</li> <li>c. Planning development and design of programs for the Department</li> <li>d. Coordination of inter-departmental communication</li> <li>e. Requisition and inventory control of equipment and supplies necessary for the Occupational Therapy area</li> </ul>			
<p><b>3. <u>KEY DUTIES</u></b></p> <ul style="list-style-type: none"> <li>a. Supervise, oversee and administer the activities of the Occupational Therapy Department</li> <li>b. Supervise and train Occupational Therapists as well as other categories of staff within the Department</li> <li>c. Assess, plan, develop and design programs, which promote, restore and maintain the clients' abilities to cope with daily activities and prevent dysfunction</li> <li>d. Assist long-term clients adjust to institutional life</li> <li>e. Coordinate inter-departmental communication</li> </ul>			

<ul style="list-style-type: none"> <li>f. Requisition and control inventory of equipment and supplies within the Occupational Therapy Department</li> <li>g. Perform other related duties as required by the job function</li> </ul>
<p><b>4. <u>KEY RELATIONSHIPS</u></b></p> <ul style="list-style-type: none"> <li>a. Report to Hospital Psychiatric Director</li> <li>b. Liaises with intra and inter-departmental representatives of the Institution as well as patients</li> </ul>
<p><b>5. <u>KEY AUTHORITIES</u></b></p> <p>Authorized to:</p> <ul style="list-style-type: none"> <li>a. Access and process confidential information</li> <li>b. Supervise staff members as well as other Occupational Therapists within the Department</li> <li>c. Assess, plan, develop and design programs to meet client needs as required</li> </ul>
<p><b>6. <u>KEY REPORTS</u></b></p> <ul style="list-style-type: none"> <li>a. Staff appraisal reports</li> <li>b. Incident reports</li> <li>c. Progress reports</li> <li>d. Operational and functional reports and documents as required</li> </ul>
<p><b>7. <u>PERFORMANCE PARAMETERS</u></b></p> <ul style="list-style-type: none"> <li>a. Performance of supervised Occupational Therapists and other categories of staff</li> <li>b. Extent to which work and targets for areas of responsibility are achieved within defined parameters</li> <li>c. Degree of compliance with established policies and procedures for areas of responsibility</li> <li>d. Timeliness and reliability of equipment and supplies storage and inventory</li> <li>e. Efficiency and reliability of inter-departmental communications systems</li> <li>f. The efficient and effective preparation and delivery of required documentation and reports</li> </ul>

**8. PERSONAL QUALIFICATIONS**

The incumbent would possess sound knowledge of Occupational Therapy fundamentals, principles and practice, sound comprehension, communication and interpersonal skills, as well as an appreciation of the institutional framework or the delivery of the region's health services.

These knowledges, skills and abilities are normally obtained in the process of acquisition of the GCE with at least five (5) passes at O'levels of which two (2) should be Mathematics and English Language, as well as a University Degree/Diploma in Occupational Therapy or an equivalent Certification with clinical training and Certification at the national examination level with at least three (3) years post qualification experience in a similar or related job function.

This document is intended to reflect those factors considered necessary to describe the principal functions of your job and should not be construed as a detailed description of all work requirements that may be inherent in the job.

**Appendix H**

## Estimated Dissemination Costs

<b>Item</b>	<b>Quantity</b>	<b>Cost per unit (USD)</b>	<b>Cost (USD)</b>	<b>Year 1 Cost (USD)</b>	<b>Year 2 Cost (USD)</b>
Brochures and flyers	500	.68	337.79	337.79	337.79
Person to person contact	NA	0	0	0	0
Facebook	NA	0	0	0	0
Instagram	NA	0	0	0	0
<b>Total Dissemination Cost</b>				<b>337.79</b>	<b>337.79</b>

## **Appendix I**

### **Project Kids CLUB: Establishing a Pediatric Occupational Therapy Department in the Public-Sector in Trinidad and Tobago**

#### **Executive Summary**

Occupational therapy (OT) can help children with disabilities to acquire or improve life skills, and enjoy happy and healthy lives (AOTA, 2015). Occupational therapists work with children with a variety of conditions to develop their abilities in areas such as gross and fine motor coordination, self-care skills, the ability to play (Dall'Alba, Grey, Williams & Lowe, 2014), self-regulation, and visual-perception. In the United States, the Department of Education estimates that the ratio of occupational therapists to children with disabilities is 18:1 (Effgen, Teeters & Myers, 2005). That is, each therapist, employed by the Government, provides treatment for 18 children and their families. In Trinidad and Tobago, the Ministry of the People and Social Development (2013) estimates that there are 3,302 children with disabilities. However, on the larger of the islands, Trinidad, there are no therapists employed in the public-sector to treat a pediatric population. Thus, the glum ratio of therapists to children in the public-sector is zero to approximately three thousand. Though private therapy can be accessed, it comes at steep costs to families, narrowing availability to only those who can afford it. Project Kids CLUB is a proposal to the Ministry of Health advocating for the inclusion of pediatric occupational therapy services at one public-sector hospital in Trinidad. The proposal explores five critical areas: (1) the demand for public-sector OT services, (2) the history of the problem, (3) the cost of operations, (4) the availability of therapists, and (5)

methods of disseminating information to target audiences. These five areas are subsequently discussed in turn.

### **The Demand for Public-sector OT Services**

To counter the argument that perhaps what is commonplace in the United States holds no weight in Trinidad, primary research conducted locally as part of this doctoral project demonstrated that families do indeed want access to OT. Between June and November, 2017, 88 parents/caregivers consented to complete questionnaires concerning their demand for occupational therapy services in the public-sector at one hospital in Trinidad, the EWMSC at Mt. Hope. Forty parents were approached at private clinics, and had at least one child currently receiving occupational, speech or art therapy. The remaining 48 were approached at the pediatric waiting room at the EWMSC itself. Of the 88 participants, 98.8% believed that families would benefit from OT services offered at the EWMSC. Sixty-seven percent of parents who wanted, but who were not receiving therapy for their child, cited cost as the main barrier. Thirty-eight percent of these families also stated that OT (which is currently saturated in the nation's capital), was not available in their area. Parents whose children were already receiving OT at private clinics were significantly less likely ( $p = .003$ ) to state that they would seek public services. The main concerns cited included doubts of the efficiency of service, satisfaction with current therapists, and inconvenience.

The results of the study demonstrate not only the demand for service, but the preferential structure of the department. Families desire an occupational therapy department that is outside of the capital, convenient, affordable and efficient. Project

Kids CLUB is designed to meet all of these requirements. The proposed location of the Centre for Learning and Understanding Behaviour (CLUB) is the Wendy Fitz Williams Children's Hospital at the EWMSC. This wing conveniently houses the only specialist developmental pediatrician at the facility, as well as many general pediatricians. Therapy provided at this public location will be offered free of charge. Measures to ensure efficiency are interwoven into the structure of the department and include the recruitment of quality therapists, strict appointment scheduling and adequate reception personnel.

### **History of the problem**

The choice of site is not spontaneous. Attempts to address the lack of public-sector OT services began at the EWMSC almost a decade ago. In 2010, the effort of one specialist developmental pediatrician and local and foreign occupational therapists resulted in the designation of an area for occupational therapy. The therapists were consulted in the renovation of the area to ensure that rooms and bathrooms were fully accessible to children and families with disabilities. The layout can accommodate three treatment rooms, office space, a waiting room, reception area, and storage rooms. Additionally, the team was asked to compose a list of essential assessment tools and equipment for a successful OT department. Basic materials were approved and subsequently purchased by the North Central Regional Health Authority (NCRHA), the governing body of the EWMSC. Currently, the renovated bathrooms, office and treatment space and new equipment remain securely locked away, awaiting Governmental approval of the proposed pediatric occupational therapy clinic.

### **Cost of Operations**

Previous investment in the unit cannot be corroborated due to the confidentiality of the invoices and stock check documents. However, it is estimated that the materials that were privy to observation are valued at approximately USD \$3,800, excluding the charges for bathroom renovations. With an added investment of approximately USD \$5,500, the unit can be sufficiently stocked to cater to the needs of a multitude of conditions, such as fine and gross motor weakness, sensory processing disorder, social and emotional skills, feeding concerns, and parent education. Though such investment may seem steep, much of this material is long-lasting, and will not need to be replaced for years. Estimates of equipment costs for the second year of operations approximate USD \$200 for those supplies that cannot be reused, such as paper and chalk. One further consideration is the likelihood of large corporations and service organizations to want to support this initiative, which can cut the start-up cost even more. Regardless, investment in this venture has the potential to benefit hundreds of children with special needs.

Undoubtedly, the largest continuous impact on budget is staffing. The remuneration of staff will be the responsibility of the North West Regional Health Authority. Estimates for one full-time senior occupational therapist, two part-time junior therapists and one receptionist are roughly USD 62,000 per annum. As the department expands, there may be need for increased employment, which will demand further state funding. However, occupational therapy has the potential to increase the productivity of persons with disabilities. Intervention can help children and families prepare for post-secondary education, work and community life (Daoud, 2000). Thus, the investment in

occupational therapists can potentially increase the productivity of persons with special needs, thus reducing state expenditure on social services.

### **Availability of Therapists**

Another major concern is the availability of occupational therapists to staff the unit. Although, occupational therapy is a growing field in Trinidad and Tobago, there are only 16 practicing therapists. Further, it is a well-known conundrum that healthcare professionals opt to practice privately, where they are able to attain significantly higher salaries than in the public service (Government of Trinidad and Tobago, 2016). Project Kids CLUB offers three solutions to this problem. Firstly, the issue of shortage of therapists will be addressed in September 2019, when the first cohort of nine occupational therapy students at the very first Master of Occupational Therapy program in the Caribbean graduates from the University of the Southern Caribbean in Trinidad. Secondly, Kids Club proposes a dual configuration in which therapists seek either full-time or part-time employment, the latter of which will offer the opportunity to supplement income with a private post. Lastly, the proposed job grade has been increased from 46 to 56 to reflect the higher qualifications (i.e. Master-level education or years of experience) required for practice. An increase in job grade is associated with a higher remuneration package.

### **Dissemination Methods**

The realization of Project Kids CLUB is dependent on the investment of two target audiences; the Government and children with disabilities and their families. Without Government support, occupational therapy will continue to be a private initiative

available only to those who can afford it. The concept of free medical care in Trinidad is commonplace. The goal of this project is to encourage the Government to make occupational therapy services, which contribute to health, wellbeing and social participation (Reitz & Scaffa, 2013) commonplace as well. Project Kids CLUB employs various media to appeal to the Government to establish the pediatric clinic at the EWMSC in order to fulfill the demands of the population, meet international and human rights standards, and invest in a resource that can improve the productivity of persons with special needs.

The second target audience is the children with special needs and their families. The longevity of the department depends on the continuous demand for occupational therapy services. As such, Project Kids CLUB involves the design and dissemination of advocacy and sensitization materials. The awareness campaign will inform families of the benefits of occupational therapy for their child with special needs, the availability of free services and the commitment of the department to quality and efficient care.

### **Conclusion**

The formation of a pediatric occupational therapy department at one public-sector hospital in Trinidad has the ability to benefit hundreds of children with special needs and their families. Primary research has already established a demand for services, and previous attempts at addressing the problem solidifies the fact that the Government recognized the importance of the profession. Project Kids CLUB consolidates new and old information in an attempt to convince the Government to build on its past investment to create a functional department that can serve the needs of society and the economy.

The proposal includes mechanisms of ensuring continued demand for services and the maintenance of high standards of care.

Trinidad and Tobago is a developing nation that has sustained free medical care despite economic hardships. Such an accomplishment demonstrates the devotion of the Government to the health of the nation. Project Kids CLUB is a chance for the Government to advance beyond health, to the wellbeing and quality of life of its most vulnerable citizens: a feat that meets, or even exceeds, multiple international and human rights standards. The fulfilment of project Kids CLUB can provide hope for hundreds of children with special needs and their families, and accomplishment for a country in search of progress.

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**Appendix J**  
Fact Sheet



*Occupational Therapy in  
Trinidad and Tobago: The  
Problem*

Pediatric occupational therapy is conducted privately in Trinidad and Tobago. Whereas public sector health care is free of charge (PAHO, 2008), there are steep costs attached to private services.

There are approximately 3,302 children with disabilities in Trinidad and Tobago, (Ministry of the People and Social Development, 2013). These families can only access OT if they can afford it. As a result, many children with special needs are left untreated.

***Project Kids CLUB: Establishing a pediatric occupational therapy department in the public-sector in Trinidad and Tobago***

Anastasia Raquel Martinez, MS, OTR  
OTD Candidate

*The Solution*

*Project Kids CLUB: The Center for Learning and Understanding Behavior*

*A public-sector pediatric OT unit at the Wendy Fitz Williams Children’s Hospital at the Eric Williams Medical Sciences Complex (EWMSC) in Mount Hope, Trinidad.*



**Location:**

- Central location, outside of the capital
- Reserved space to house the unit, as well as equipment

**Services:**

- Individualized assessment
- Individual and group sessions
- Family education programs

**Staffing:**

- Full and part-time posts
- New local graduates
- OT aides from the psychiatric hospital.
- Volunteers

**Funding:**

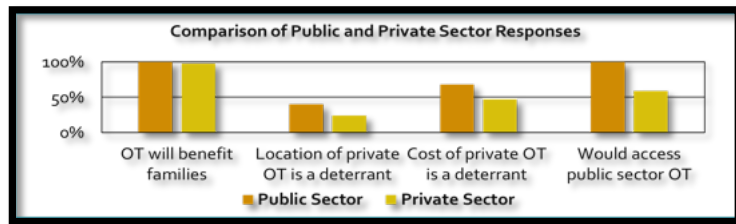
- Government support
- Volunteer hours
- Grants & donations
- Support from other professions

## Proof of the Demand for Services

### Methods

Primary research examined the parent/caregiver demand for public-sector OT.

Eighty-eight parents/ respondents completed questionnaires in the waiting room at the EWMSC and two private therapy clinics in Trinidad.



### Results

- 99.8% of respondents believed that families would benefit from a pediatric OT clinic at the EWMSC.
- Cost of service was the main deterrent to seeking OT privately
- Concerns: efficiency, inconvenience, satisfaction with current service

## Implications of Project Kids CLUB

### For Occupational Therapy

- Job creation
- Influence in public-sector affairs
- Provision of services for the most vulnerable population

### For Children and Families

- Free services
- Caregiver trainings

### For the Government

- Meeting international standards and human rights charters (e.g. the Convention on the Rights of the Child, United Nations, 1989)
- Potentially increased productivity of persons with disabilities (AOTA, 2016)
- Satisfying the population's demand



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**Curriculum Vitae**

