Children's Orthotic Project Evaluation

Introduction

Footscape is a non-profit organisation that recognises disadvantaged communities are predisposed to debilitating foot pathology and endeavours to assist affected individuals sustain quality of life. The organisation is registered with *Consumer Affairs Victoria* and the *Australian Charities and Not-for-profits Commission*. In consideration of organisation objectives (Appendix One) Footscape initiated the *Children's Orthotic Project* during 2013 with the purpose to fund orthoses for financially disadvantaged children encountering foot pathology.

Orthotic therapy is a common intervention option utilised by Podiatrists in the management of foot related problems. Rome et al (2010) define orthoses as in-shoe medical devices that alter the magnitudes and temporal patterns of the reaction forces acting on the plantar aspect of the foot in order to allow more normal foot and lower extremity function and to decrease pathologic loading forces on the structural components of the foot and lower extremity during weight-bearing activities. The authors outline custom made orthoses are prescription devices made from a custom mould of the plantar foot whereas customised or off-the-shelf orthoses are pre-fabricated devices not made from a custom mould. As manufactured devices can be expensive to purchase, however, low socioeconomic families may have difficulties accessing and affording this treatment option. Furthermore as a child's feet are constantly growing there is a need to purchase new, larger orthoses at regular intervals. The objective of the Children's Orthotic Project is therefore to permit 'at-risk' children the opportunity to access orthoses and help their young bodies grow and develop as healthy as possible.

This evaluation shall explore the underlying basis for initiating the Children's Orthotic Project in consideration of existing literature. Derived methodologies for establishing and implementing the project in association with partnering organisations will be outlined. Discussion of evaluation processes and results will be conducted before final recommendations and conclusions compiled for stakeholders to advance the future direction of the project.

Current Practice

Currently in Victorian public hospitals and community health centres it is generally expected that the parents/guardians of children prescribed orthoses will attend to expenses associated with the direct manufacture of devices. Whilst such costs are significantly less than orthotic devices purchased in a private setting the monetary outlay required by financially disadvantaged households may still prove considerable. Furthermore, as previously described, given a child's feet are constantly growing there may be a need to purchase new, larger orthoses at regular intervals.

There are existing pathways available for Podiatrists to dispense orthotic devices for children of financially disadvantaged households unable to afford associated costs. Podiatrists practising in Victorian public hospitals and community health centres are somewhat familiar with the Department of Health and Human Services 'Victorian Aids and Equipment Program'. This program provides people with a permanent or long-term disability with subsidised aids

equipment, home and vehicle modifications. The principal objective is to enhance the independence of people with a disability in their home, facilitate their participation in the community and support families and carers. Ballarat Health Services' Statewide Equipment Program (SWEP) administers the Victorian Aids and Equipment Program for items such as mobility aids, including wheelchairs and scooters, hoists, beds, commodes, continence aids, domiciliary oxygen, home modifications and vehicle modifications. The parameters of the Victorian Aids and Equipment Program are outlined on the SWEP website (https://swep.bhs.org.au/). In preparing this report an application was made to the Victorian Department of Health and Human Services 'Freedom of Information Unit' to ascertain information and data pertaining to foot orthoses previously funded for children through this program. Unfortunately at the time of finalising this report relevant content has not been made available for examination and review.

In consideration of personal experiences and difficulties accessing the Victorian Aids and Equipment Program it is the contention of this author that program parameters are too complex and time consuming which prohibit Podiatrists issuing suitable foot orthoses for financially disadvantaged children in a time effective manner. It was demonstrated by Skaggs et al (2007) that United States children with government based insurance faced significant delays in both the authorisation and actual procurement of orthoses when compared to those with preferred provider organisation insurance plans. The authors concluded children with government sponsored insurance would benefit from a streamlining of the authorisation process, as well as programs designed to facilitate patient and family compliance. Footscape has recognised the apparent need for a streamlined orthoses funding application process in derived Children's Orthotic Project methodology.

Notwithstanding alternative client management plans are available for Podiatrists to oversee delivery of orthotic therapy for financially disadvantaged children. These include:

a) External welfare providers may be approached for financial support. Footscape itself is an example of an external welfare provider.
b) Respective public hospitals and community health centres maintain the authority to absorb associated costs and distribute an orthotic device free of charge. Whilst the author has observed this practice being undertaken in extenuating circumstances as these organisations function on a not-for-profit capacity it is unsustainable and unrealistic for a workplace to employ such universal operating procedures. At the same time these service providers maintain a right to not issue orthoses in the event a client is unable to afford the devices.
c) Podiatrists may offer and issue a cheaper, more basic orthotic device that can be afforded by the client. The ethics and practically of this management option will be further explored during this evaluation.

Program Methodology

Footscape devised core policies and procedures for the pilot project before introducing and presenting the proposal to several accredited health service organisations in Victoria. Memorandum of Understanding documentation would be established in conjunction with:

- Cohealth
- Darebin Community Health
- Inner East Community Health
- Inner South Community Health Service
- ISIS Primary Care
- Manningham Community Health Services
- Merri Community Health Services
- Plenty Valley Community Health

These community health organisations, predominately funded by the Department of Health and Human Services, are responsible for providing public Podiatry services in the metropolitan local Government areas of Boroondara, Brimbank, Darebin, Hobson's Bay, Manningham, Melbourne, Moonee Valley, Moreland, Port Phillip, Whittlesea, Wyndham and Yarra.

Working parameters for practical implementation of the Children's Orthotic Project were determined and approved throughout all devised Memorandum of Understanding documentation. Key points of order pertained to:

a) Footscape would grant the partnering organisation funds to purchase orthoses for clients - under the age of eighteen - encountering foot related medical problems. No financial commitment was sought from the partnering organisation to implement the project.
b) Personal details of a client (except for age) would not be released to Footscape. The client's UR identification number would be exclusively used for any communication between the partnering organisation and Footscape.
c) Only clients classified by the partnering organisation as belonging to a low income family/household would be eligible for funding. As the Department of Health and Human Services (2015) model of income range classification (Table 1) is universally adopted throughout Victorian health service organisations such cataloguing serves firstly as a valid and reliable model for Footscape to define financial disadvantage and secondly to establish consistency for practical implementation across partnering organisations.

	Low	Medium		High
Individual	< $36,438	> $36,438	< $79,514	> $79,514
Couple	< $55,770	> $55,770	< $106,298	> $106,298
Family (one child)	< $61,647	> $61,647	< $111,941	> $111,941
(plus $5,877 per additional child)				

Table 1: Victorian Department of Health and Human Services model of income range classification

d) A client successfully acquiring orthoses should not have a further application considered for a twelve month period, unless extenuating circumstances are relevant.
e) Distributed monies are intended to cover the full cost of an orthoses purchased.
f) Monies should not be utilised to attend to delivery costs.
g) It is expected that orthoses purchased will be either customised or off-the-shelf design. However custom made orthoses may be obtained if extenuating circumstances are apparent.

As orthoses need to be replaced regularly as a child grows, this form of therapy may represent a substantial financial burden to families with young children. Therefore in the event orthoses are indicated cost-effective options would normally need to be considered. In their research Whitford and Esterman (2007) demonstrate that there was little difference between custom made orthoses and prefabricated devices with respect to measured outcomes. The authors conclude the more affordable customised or prefabricated alternative as being preferable to reduce costs. Similarly Evans (2008) recognises only a small percentage of paediatric cases require custom made orthoses and recommends a selection of many low-cost generic devices that provide good positional support and relief of presenting symptoms. The researcher notes that whilst prefabricated devices are not as durable this is seldom an issue as foot growth frequently demands change before material collapse.

Accordingly the alternative client management option that Podiatrists may offer and issue a cheaper, more basic orthotic device that can be afforded by the client is ethically correct and practically achievable. As such Footscape anticipated Podiatrists from our partnering organisations to acquire orthoses in a customised/off-the-shelf/prefabricated design. Nonetheless custom made orthoses could still be obtained if clinical presentation dictated. Powell et al (2005) clarifies children with rheumatoid arthritis have been found to benefit from customised foot orthoses whilst Evans (2010) highlights such devices accommodate gross asymmetries including unilateral clubfoot and hemiplegia.

h) Podiatrists would be afforded the responsibility of acquiring, dispensing and monitoring the client's orthoses. It remained the responsibility of the partnering organisation Podiatry Department to ensure the orthoses purchased with funds awarded by Footscape be deemed appropriate in the management of their client.

A project assumption is that tertiary qualified Podiatrists registered with the *Australian Health Practitioner Regulation Agency* employed by our partnering organisations are competent in managing the paediatric foot. Whilst it is beyond the capacity of this evaluation to critique clinical decision making and longitudinal client outcomes for each funded orthoses, a basic appraisal of the strengths and confidence levels of participating Podiatrists is appropriate. Particularly as there is long standing debate over whether or not to use orthotic therapy in the treatment of paediatric pes planus. Such debate centres on the fact that there is no way to distinguish between the flatfeet that will become symptomatic and the flatfeet that will remain asymptomatic throughout a client's life. Rome et al (2010) summate the argument is ongoing with no gold standard for treating children.

For children with pes planus, treatment is often sought by parents and provided by well-intentioned health care practitioners concerned about preventing future morbidity. Afterall

intervention with foot orthoses has few side effects. Kane (2015) articulates devices are presumed to prevent excessive pronation, provide neuromuscular re-education and normalise body mechanics, alleviate symptoms and prevent deformity, and/or help shape the child's developing arch. However, Evans (2008) highlights this is where clinical concern arises. The author questions whether such an abnormal physiologic feature will become symptomatic and indeed the justification of providing treatment 'just in case' from a preventive point of view. In their study Pfeiffer et al (2006) found that approximately ten per cent of children were using some form of orthotic device despite only one to two per cent were being symptomatic. The researchers put forward that greater than ninety per cent of the treatments were unnecessary.

Conflicting opinions pertaining to the intervention of paediatric pes planus do exist in literature. Rome et al (2010) explain that whilst some experts consider pes planus to be normal in early childhood and that the condition usually resolves spontaneously without treatment other experts suggest treatment of the flexible form of pes planus is necessary as it may lead to disability and joint damage. The authors lament a lack of good quality studies that have evaluated non-surgical interventions for paediatric pes planus.

As pes planus represents the clinical picture for a variety of aetiologies Yeagerman et al (2011) put forward that health professionals must provide an appropriate treatment course for each individual. It is therefore anticipated participating Podiatrists in the Children's Orthotic Project are conducting suitable paediatric assessments based upon evidence based practice to make clinical judgements. Evans (2008) endorses the American College of Foot and Ankle Surgeons consensual agreement for the diagnosis and treatment of paediatric flatfoot. This document firstly recommends the taking of a thorough and structured history, including age, family history, symptoms, trauma, activity, systems review and previous treatment. Secondly clinical examination then explores arch shape with weightbearing, range of motion, tender areas, gait and diagnostic studies. In the event foot orthoses are prescribed and issued, participating Podiatrists should concurrently be considering further conservative (non-surgical) interventions as part of developing an overall client management care plan. Rome et al (2010) outline such interventions extend to advice, stretching, footwear selection and modifications, activity modifications, manipulation, serial casting, appropriate weight reduction and anti-inflammatory medications.

i) Footscape and each respective community health service partnering organisation would be responsible for reviewing the derived Memorandum of Understanding parameters described above. In the majority of established working relationships the project period was deemed to be twelve months before an evaluation would be conducted.

Evaluation Methods

Although Memorandum of Understanding documentation had been established with eight community health organisations only working relationships with ISIS Primary Care and Plenty Valley Community Health had extended beyond twelve months of practical operation and incorporated a project review at the time of preparing this evaluation. Accordingly, this

evaluation will focus exclusively upon the project undertaken with these two respective organisations.

The Children's Orthotic Project shall be evaluated through three mediums:

1. Annual reports submitted by partnering organisations comprising completed Footscape paediatric orthoses assessment forms (Appendix Three) and corresponding invoices/receipts.
2. Memorandum of Understanding documentation review between Footscape and respective partnering organisations.
3. Survey of participating Podiatrists employed by our partnering organisations

Results

1. Annual Reports

Paediatric orthoses assessment forms with corresponding invoices/receipts have been successfully submitted to Footscape by ISIS Primary Care and Plenty Valley Community Health as part of annual reporting agreements. Distributed content has been collated and is now presented in the following tables.

2013		
Organisation	**Orthoses funded**	**Cost ($)**
ISIS Primary Care	8	877
Total	**8**	**877**

2014		
Organisation	**Orthoses funded**	**Cost ($)**
Plenty Valley Community Health	6	493
ISIS Primary Care	6	722
Total	**12**	**1215**

The number of orthoses funded in this pilot phase of project delivery has met Footscape expectations. As previously outlined there is a project assumption that participating Podiatrists are competent in managing the paediatric foot. Whilst it is beyond the scope of this evaluation to appraise the clinical decision-making it is likely Podiatrists aren't abusing the availability of this new funding stream and overprescribing orthotic therapy in the treatment of paediatric pes planus.

2. Memorandum of Understanding documentation review

Representatives of Footscape and respective partnering organisations formally reviewed Memorandum of Understanding documentation at the conclusion of each specified project period. A summary of key discussion points from these meetings comprise:

1. The objectives of the Children's Orthotic Project had been achieved with positive outcomes obtained for all stakeholders.
2. Memorandum of Understanding documentation had served as a reliable and effective platform governing project implementation.
3. The progression from initial Footscape contact to managerial authorisation of Memorandum of Understanding documentation had been time consuming.
4. Areas of strength within the Memorandum of Understanding document extended to:
    a) Use of the Department of Health and Human Services income range classification which allowed participating Podiatrists to promptly confirm a client's eligibility for Footscape funding during the allotted appointment time.
    b) The availability of monies throughout the project period enabled consulting Podiatrists to streamline the prescription and dispensing of orthoses without delays in awaiting funding approval.
    c) Partnering Community Health Services are better positioned to respond and meet needs of their target clientele.
5. Areas of the Memorandum of Understanding document requiring clarification and modification pertained to:
    a) Internal reporting procedures in order to assist participating Podiatrists successfully complete reporting requirements.
    b) The use of orthotic terms and definitions. There had been confusion amongst participating Podiatrists as to the variety of orthotic device terms listed. As previously described, such terms extended to custom made, customised, prefabricated and off-the-shelf devices. As a result of this confusion completed Paediatric Orthoses Assessment Forms frequently lacked the specific style of orthoses prescribed. This content would ideally be prepared and included as part of annual reporting.
    c) The influence of staff changes in a Podiatry Department. As new employees had been initially slow to adapt and utilise this new funding stream they would benefit from an orientation into the project and knowledge of the Footscape organisation.

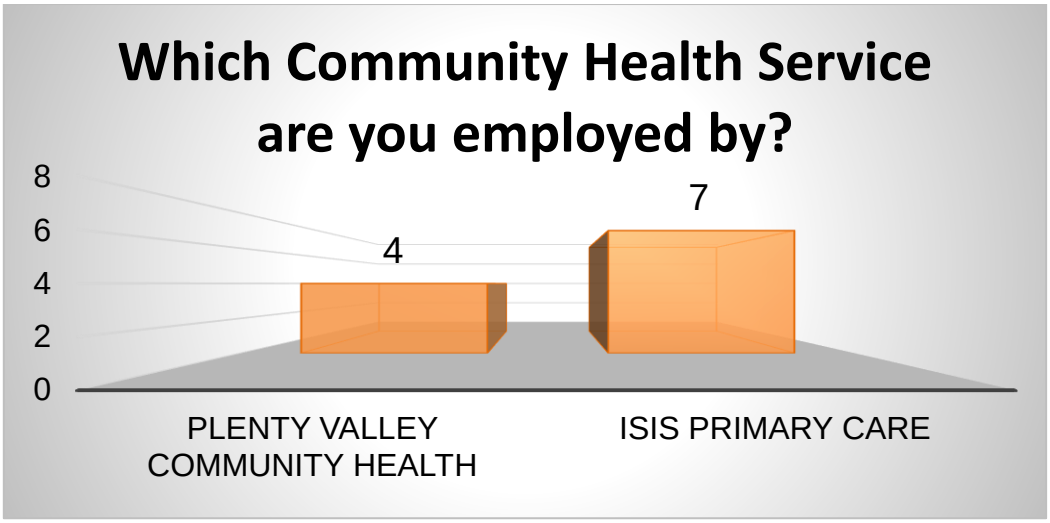
ISIS Primary Care and Plenty Valley Community Health each maintained a commitment towards implementing the Children's Orthotic Project with Footscape.

3. Podiatrist Survey

During the evaluation period all nineteen Podiatrists employed by ISIS Primary Care and Plenty Valley Community Health were invited to participate in the survey questionnaire (refer Appendix Three) by email. A total of eleven completed forms were received between the two organisations which represents a 58% response rate. The lower than expected response rate can be principally attributed to workplace absences during to the evaluation period on account of maternity leave and annual leave. At the same time it is understood that some Podiatrists had been reluctant to consult paediatric clients and therefore did not actively participate in the proceedings of the Children's Orthotic Project. Survey results are outlined in the following section.

Question One

Which community health service are you employed by?



As outlined above eleven completed survey forms were received from Podiatrists employed at ISIS Primary Care and Plenty Valley Community Health.

Question Two

What do you view are the strengths of the Children's Orthotic Project?

Survey responses to this question are outlined in the following table:

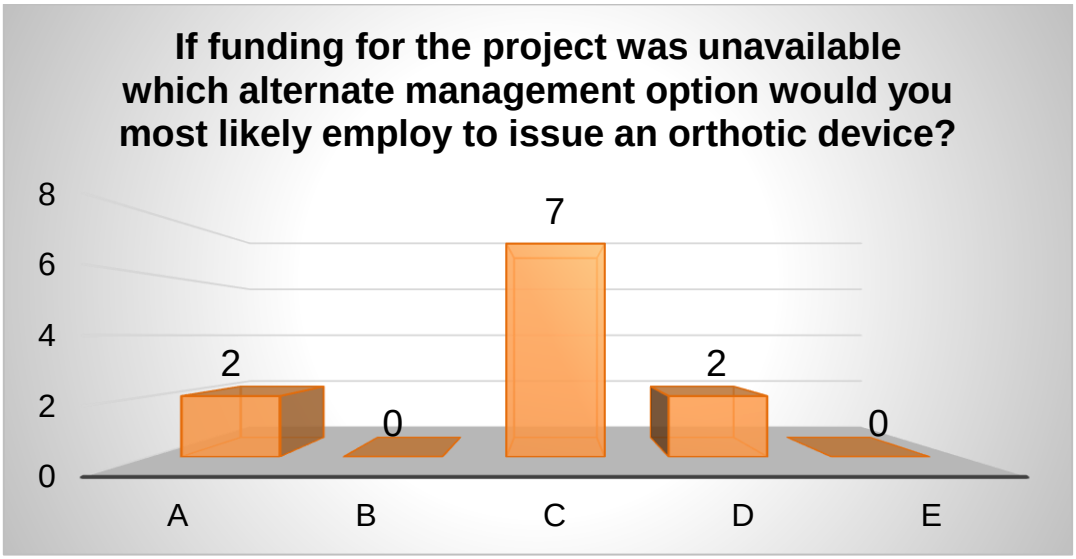
Direct application process - application goes to senior clinician for approval.
Timely if not immediate approval.
No forms for the client to complete, no invasive questioning required.
Straightforward and time-efficient application for clinician to complete.
Access to custom orthoses to resolve pain in children.
Allowing access to orthotic therapy in paediatrics who could otherwise not afford it without the funding and would benefit from this therapy.
Use of low income model to define financial disadvantage
The application process is simple with minimal red tape and funds immediately available. This is a contrast to the SWEP program.
Assisting those disadvantaged.
It provides orthotic therapy to children that otherwise wouldn't be able to access orthoses due to cost.
Gives an opportunity to provide best orthotic devices for children whose family may not be able to afford them.
Early podiatric intervention for paediatric foot condition which requires medical orthotics.
The opportunity to prescribe orthoses without financial burden, especially when that is the first line option for client. Very easy application process.
For families whose children require orthoses and can't afford them/ have financial difficulties it provides the children with the orthotic device that they need without the financial stress.

Participating Podiatrists have recorded a number of strengths they associate with the project. Recognised themes identified within these responses pertain firstly to the capacity of the project to assist disadvantaged persons by facilitating access to orthotic therapy. Secondly, devised processes can be completed in a time efficient manner to the benefit of both Podiatrists and clientele.

Question Three

If funding for the project was unavailable which alternate management option would you most likely employ to issue an orthotic device. Please select one option.

a) *Victorian Aids and Equipment Program/SWEP application.*
b) *Financial donation from external welfare provider*
c) *Issuing a cheaper, more basic orthotic device that can be afforded by the client*
d) *Orthotic devices would not be issued as client can't pay for them*
e) *Other. Please explain*



Seven of the eleven surveyed Podiatrists (64%) suggested they would most likely issue a cheaper, more basic orthotic device that can be afforded by the client. Such principles are consistent with aforementioned evidence based research by Whitford and Esterman (2007); Evans (2008) endorsing low-cost generic devices as the first choice of treatment for the majority of paediatric clients. It is noteworthy that only two Podiatrists (18%) would consider submitting an application for the more complex Victorian Aids and Equipment Program/SWEP funding program.

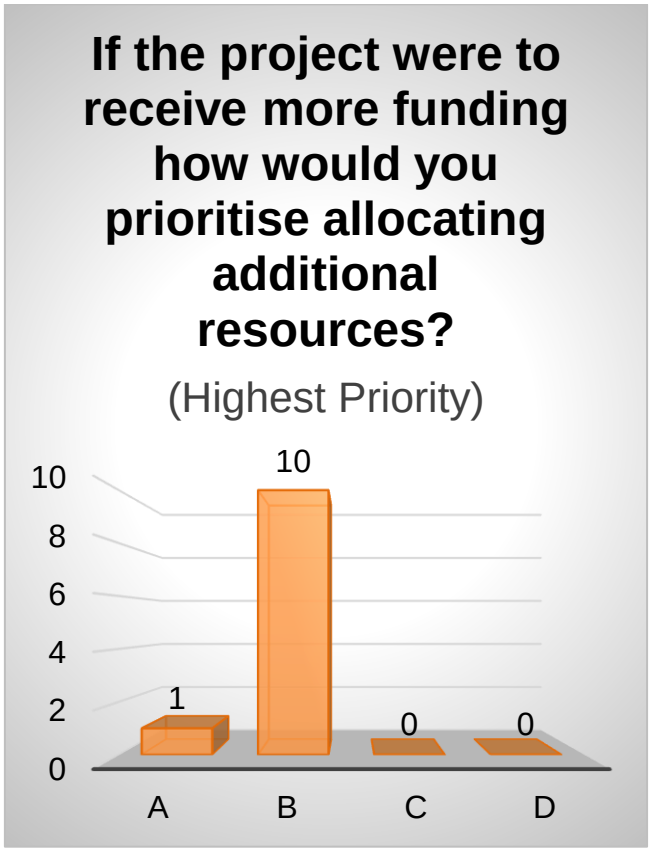
Question Four

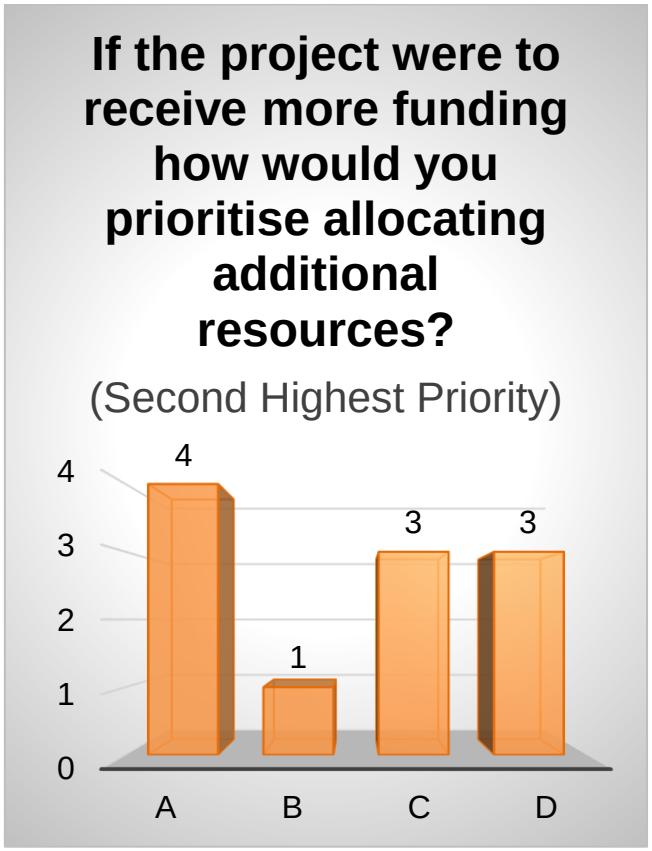
If the project were to receive more funding how would you prioritise allocating additional resources? Please rank all options from 1 (highest priority) to 4 (lowest priority).

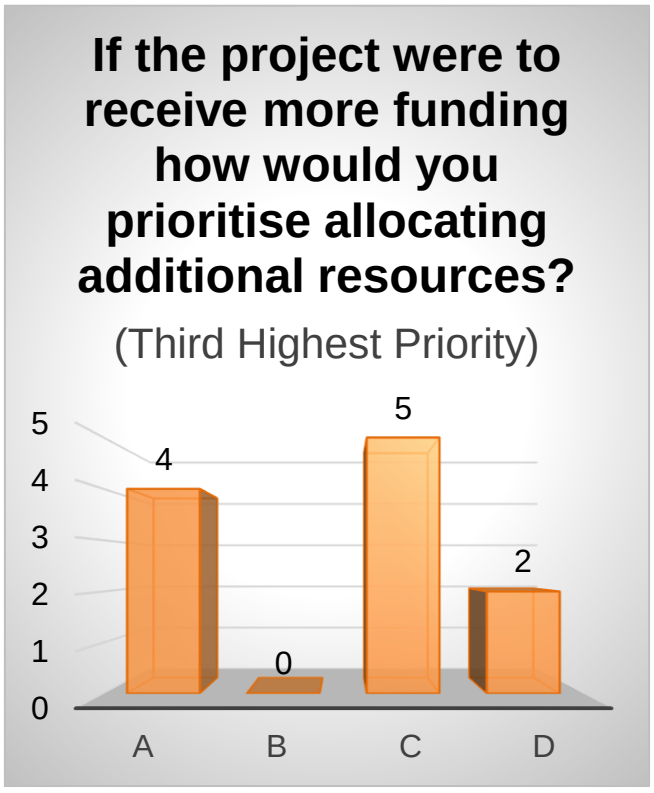
a) *Commence funding orthotic devices for low income adults*
b) *Fund an item of suitable footwear when each child receives an orthotic device*

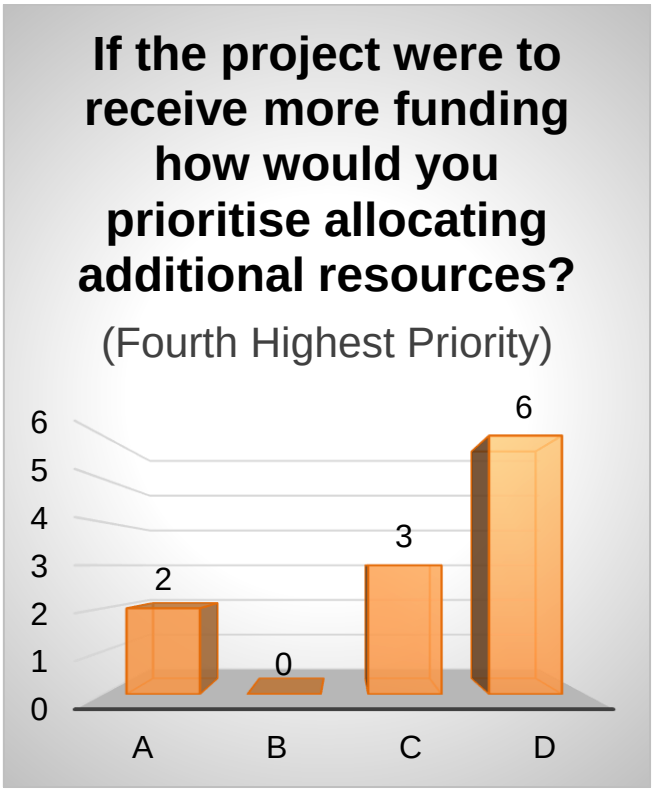
c) *Expansion of the project with further community health services throughout Australia.*

d) *Facilitate relevant professional development opportunities for Podiatrists.*







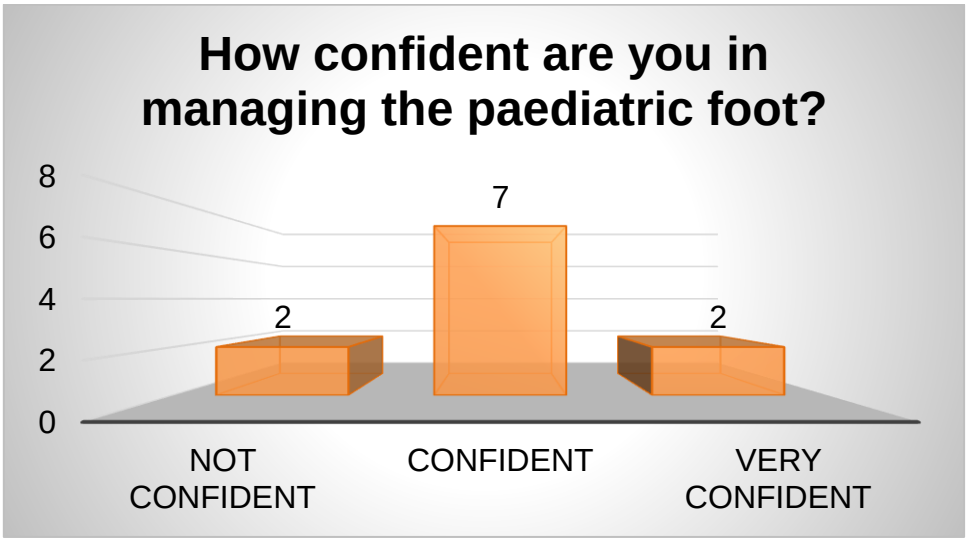


Ten of the eleven surveyed Podiatrists (91%) indicated they would prioritise allocating prospective resources towards funding footwear for those children receiving orthoses through this project. As there is an argument an orthotic device is only as effective as the footwear it is being worn in, adoption of this stance amongst participating Podiatrists is not surprising. This topic will be examined further in the recommendations section below.

Question Five

How confident are you in managing the paediatric foot? Please select one option.

a) *Not confident*
b) *Confident*
c) *Very confident*

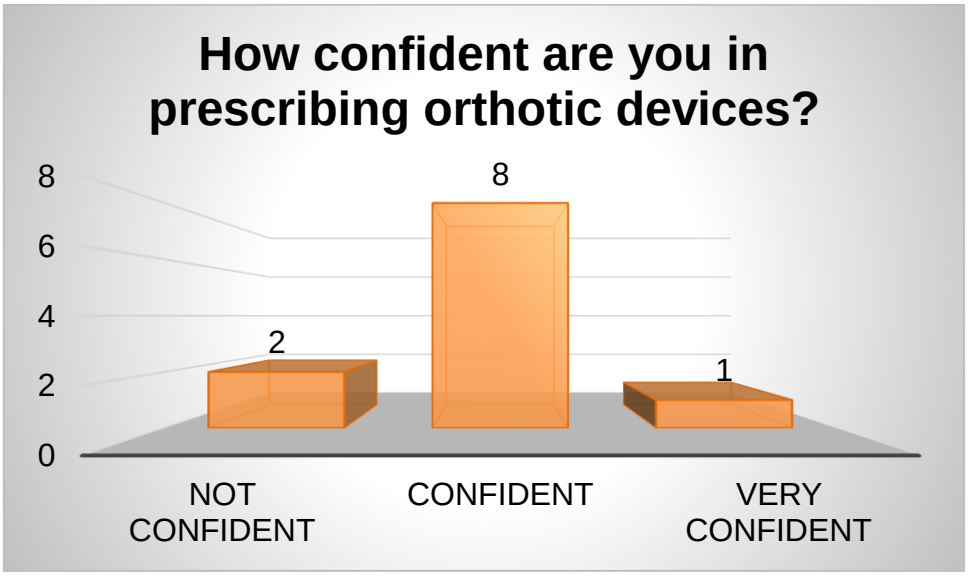


Nine of the eleven surveyed Podiatrists (82%) proclaim confidence in managing the paediatric foot. Despite the small sample size this result in conjunction with annual reporting feedback is suggestive participating Podiatrists are capable of correctly identifying paediatric clients whom require orthotic therapy. At the same time as two surveyed Podiatrists (18%) declared a lack of confidence in managing the paediatric foot the ongoing need for professional development is highlighted.

Question Six

How confident are you in prescribing orthotic devices? Please select one option.

a) *Not confident*
b) *Confident*
c) *Very confident*



Nine of the eleven surveyed Podiatrists (82%) declare confidence in prescribing orthoses regardless of previously reported confusion over terms and definitions. Despite the small sample size this result is suggestive Footscape funds are being utilised appropriately to purchase suitable orthotic devices. Nonetheless as two surveyed Podiatrists (18%) state a lack of confidence in prescribing orthotic devices the recurrent need for professional development is again emphasised.

Question Seven

How could this project be improved?

Survey responses to this question are outlined in the following table:

It is great, certainly footwear would be beneficial. However this may quickly deplete funds in subsequent years if family have developed an expectation of shoe replacement for children when they return for review. I would compare this to the way SWEP funding is directed to replacement and repair before it is allocated to new applicants.
Better understanding of the Footscape organisation.
Professional development opportunities pertaining to paediatric clients and orthoses.
Greater amount of professional development opportunities for Podiatrists to gain a greater amount of confidence in prescribing an orthotic through Footscape.
To assist in funding appropriate footwear as well as orthoses.
Funding for footwear and for low income adults.
Active participation of community podiatrists.
Possible funding for footwear as well.
Potentially funding could then be used in addition to subsidise children's footwear. The orthotic is often only as good as the shoe it is placed in.

Participating Podiatrists have listed a number of platforms detailing how they believe the project could be improved. Recognised themes identified within these responses pertain firstly to extending funding in order to provide additional footgear needs for low income children and adults. Secondly there is desire for a stronger association between participating Podiatrists and the Footscape organisation itself.

Question Eight

Are there any further comments you wish to add?

Survey responses to this question are outlined in the following table:

From year to year the need for custom orthotics will vary as there are often good outcomes achieved by using prefabricated or modified prefabricated options. Some years I will apply for several clients, others possibly one application or none at all.
This is a fantastic initiative and I praise Footscape for developing the project.
The Children's Orthotic Project is an invaluable resource. I hope it continues and that it can expand to encompass other vital foot care/footwear needs for children in need.
This project is a great initiative.
Currently I have used the funding to provide several children from low-income families with orthoses. All are very thankful for the service.

Participating Podiatrists have recorded a number of further comments for consideration. The recognised theme identified within these responses pertains to the positive impact of the Children's Orthotic Project upon the ongoing need to assist financially disadvantaged children encountering foot pathology.

Discussion

Evaluation of the Children's Orthotic Project pilot phase has been undertaken through a variety of quantitative and qualitative research methodologies. Ascertained findings determine the project has positively impacted all stakeholders with aforementioned benefits extending to financially disadvantaged children (and their families), participating Podiatrists, partnering community health services and Footscape. However as a limited amount of data has been accumulated these findings are unable to generate statistical inferences. Nonetheless recorded information helps provide Footscape with insight into the strengths and weaknesses of the initial project design.

Strengths

1. *Use of Department of Health and Human Services (2015) income range classification.* Such cataloguing serves as a valid and reliable model for Footscape to define financial disadvantage. As this model is equally employed throughout state-wide health service organisations its application further serves to establish consistency and promote understanding of practical implementation for current and prospective partnering organisations.

2. *Distribution of funds at the commencement of the working relationship with a health service organisation.* The availability of funds throughout a project period has enabled consulting Podiatrists to provide suitable and time effective client management without delays in preparing orthoses application forms and awaiting funding approval. Streamlining this process has consequently enabled client contact time to be minimised.

3. *Consistency of Memorandum of Understanding documentation.* Established parameters have seldom varied across partnering health service organisations. The main discrepancy pertains to internal health service reporting procedures which is dependent upon the respective workplace structure. In the event annual reporting processes are successfully adhered to the workplace structure does not significantly affect the practical implementation of the project. The consistency of Memorandum of Understanding documentation provides the opportunity to devise a standard project template or framework to facilitate the project across state health service organisations.

Weaknesses

1. *Current attempts to expand the project throughout state health service organisations.* To date the project has essentially been operated as per a pilot program in which Footscape has approached and made preliminary introductions with individual Victorian health service organisations. During attempts to further expand the project progression from initial Footscape contact to conducting of meetings with Podiatrists/Managers to finally establishing and signing approved Memorandum of Understanding documentation has been slow. Impediments to such progression have included:

    a) *A lack of external knowledge and understanding regarding Footscape.* As a recently founded non-profit organisation the mission and vision of Footscape remains widely unknown. Consequently prospective partnering organisations have demonstrated initial caution towards Footscape and the project ideals itself.
    b) *Managerial prioritisation.* It is apparent persons of authority are prioritising alternative work matters and activities before considering Footscape's unique proposal.
    c) *Project portrayal.* General feedback is forthcoming that the project is viewed upon the Footscape website as only being available to select health organisations at the explicit discretion of Footscape.
    d) *Podiatrist confidence levels to manage paediatric clients*.

Recommendations

The wealth of knowledge ascertained through this evaluation process has been utilised by the author to devise recommendations for the future direction of the project. These are:

1. As the suitably termed 'pilot phase' of the Children's Orthotic Project has proved successful the focus of Footscape should now be directed towards adopting a strategy to systemically market and expand the project throughout Victorian health service organisations. It is recommended that the project should be rebranded as the 'Victorian Children's Orthotic Project' employing universal operating methodologies and clear guidelines to introduce, facilitate understanding and streamline practical implementation across state health service organisations. Development of standard introductory letters, procedural forms incorporating existing Memorandum of Understanding parameters for managerial approval and guidelines for completing reporting requirements should all be undertaken and made available for distribution.

2. Establishment of a recurrent professional development program recognised by the *Podiatry Board of Australia* and *Australian Health Practitioner Regulation Agency (AHPRA)* supporting Podiatrists participating in project service delivery. Whilst the small contingent of respondents in this evaluation reported general confidence in assessing and managing the paediatric foot, Kane (2015) identified mentoring remains the most common source of foot orthoses education and therefore much of the information clinicians rely on for fabrication and integration of foot orthoses into practice may be less current and open to scientific bias. In consideration of the ongoing debate and ethical considerations previously described it is in Footscape's best interest to promote evidence based practice as part of a continuous quality improvement activity to upskill participating Podiatrists, enhance project role out (including establishing greater connectivity between Footscape and participating Podiatrists), ensure distributed funds are being utilised optimally and promote client outcomes. It is noted that continuing professional development is a mandatory requirement of AHPRA registration for Podiatrists.

3. Feedback obtained through the evaluation has raised the prospect of funding suitable footwear for those children receiving orthoses. Indeed Mauch et al (2009) explains that the impact of footwear upon gait needs be considered when assessing the paediatric patient and evaluating the effect of shoe or in-shoe interventions. Wegener et al (2011) elaborates children's feet react more sensitively, especially to external factors, and are therefore subjected to greater traumatic stresses than adult feet. The authors conclude since the foot structure of young children's feet is not consolidated and the influence of compression can be harmful, accurate fitting is essential. Echarri and Forriol (2003) equally confirm ill-fitting shoes can impede the normal development of the maturing foot and cause problems in childhood as well as adulthood.

   During the long paediatric growth period, footwear must be constantly adapted to immediate needs, being discarded when outgrown rather than when outworn. For those families experiencing financial disadvantage choice of footwear style and longevity of use may be compromised by limited availability of funds, even when receiving an orthotic device at no charge. The provision of well-fitting shoes that meet the anatomical requirements of the feet may therefore reduce consequential costs caused by treating foot problems and their complications. Resultant benefits could extend from improvement in the quality of life and well-being for the child to reductions in public health expenditure. As Evans (2010) determines orthoses are shoe dependent and the combination of shoe/orthotic/foot needs to be appreciated as the child's entire functional unit, it is therefore appropriate for Footscape to investigate pathways in which this proposal can be achieved.

4. Conduction of research to analyse future project delivery and resultant longitudinal implications. The objective of this project is to ensure children encountering foot pathology may access orthoses and ensure their young bodies can develop as healthy as possible. Therefore key performance indicators including efficacy of orthotic therapy access, quality of life for assisted persons and long term economic benefits across the

public health system need to be determined and appraised. It is anticipated this research can be utilised to:

a) Verify pathways by which the project may further evolve. Appraisal of project rebranding, expansion, professional development delivery and the introduction of footwear distribution should all be completed.

b) Identify gaps in knowledge. The 'high risk foot' is a term currently linked with those feet encountering significant complications of chronic health conditions such as diabetes and rheumatoid arthritis. Associated costs extend from compromises in client quality of life and independence to financial burdens upon the public health system. In so doing Bergin et al (2013) exclaim provision of appropriately prescribed footwear, used alone or in conjunction with custom-made foot orthoses, to people with diabetes in communities of financial disadvantage needs be addressed as part of a comprehensive national strategy to reduce the burden of diabetes and its complications on the health system. It is this author's contention that the ability to ascertain information and identify gaps in knowledge can potentially lead to a reconsideration of this 'high risk foot' definition to incorporate the long term implications of the growing paediatric foot with biomechanical abnormalities. Through such developments stakeholders may advocate for the needs of financially disadvantaged children encountering foot pathology and lobby Government and other policy making bodies to address this health inequity.

Conclusion

Footscape initiated the Children's Orthotic Project with the purpose to fund orthoses for financially disadvantaged children encountering foot pathology and permit affected individuals the opportunity to grow and develop as healthy as possible. Core policies and procedures for the pilot project were devised in consideration of evidence based practice before Memorandum of Understanding documentation was established with several community health organisations located in metropolitan Melbourne. Quantitative and qualitative research methodologies were then employed to evaluate project outcomes. Ascertained findings determined the Children's Orthotic Project had positively impacted all stakeholders, however, limitations within accumulated data signified that statistical inferences were unable to be produced. Nevertheless the evaluation provided valuable insight as to the strengths and weaknesses of the initial project design in order to generate recommendations for future delivery.

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Appendices

Appendix One

Footscape Objectives

1. To educate, train and provide awareness for the incorporation of podiatric principles and practices.
2. To address the social and medical determinants of foot pathology within settings of Australian disadvantaged and Indigenous communities and developing communities abroad.
3. To provide Podiatrists and other health professionals involved in lower limb pathologies with opportunities for self-development through exposure to developing communities.
4. To advance foot and lower limb research within developing communities.
5. To serve economically disadvantaged individuals in need of foot and lower limb medical care.

Appendix Two

Paediatric Orthoses Assessment

Date: _____ Podiatrist: _____

Patient UR Number: _____ Age: _____

Relevant medical history: _____

_____

_____

Podiatric history: _____

_____

_____

Clinical assessment: _____

_____

_____

_____

Treatment Plan: _____

_____

_____

_____

Checklist:

1. Are foot orthoses appropriate in the management of this patient? YES/NO
2. Has the patient previously received orthoses funded by Footscape? YES/NO
3. If yes, what was the last date of issue? _____
4. Does your organisation classify the patient as belonging to a low income family? YES/NO

Please retain this form for records

Appendix Three

Children's Orthotic Project Survey

Since 2013 Footscape has been implementing the Children's Orthotic Project in conjunction with several community health services across metropolitan Melbourne. Footscape is now reviewing the project and requests your assistance. Please complete the following survey questions by June 22, 2015.

1. **Which community health service are you employed by?**

   _____

2. **What do you view are the strengths of this project?**

   _____
   _____
   _____
   _____
   _____

3. **If this project were to receive more funding how would you prioritise allocating additional resources? Please rank all options from 1 (highest) to 4 (lowest).**

a) Commence funding orthotic devices for low income adults
b) Fund an item of suitable footwear when each child receives an orthotic device
c) Expansion of the project with further community health services throughout Australia.
d) Facilitate relevant professional development opportunities for Podiatrists.

4. **If funding for this project were to cease which alternate management option would you most likely employ to issue an orthotic device. Please select one option.**

a) Victorian Aids and Equipment Program/SWEP application.
b) Financial donation from external welfare provider
c) Issuing a cheaper, more basic orthotic device that can be afforded by the client
d) Orthotic devices would not be issued as client can't pay for them
e) Other. Please explain _____
   _____

5. **How confident are you in managing the paediatric foot? Please select one option**

a) Not confident
b) Confident
c) Very confident

6. **How confident are you in prescribing orthotic devices? Please select one option.**

a) Not confident
b) Confident
c) Very confident

7. **How could this project be improved?**

_____
_____
_____
_____
_____

8. **Are there any further comments you wish to add?**

_____
_____
_____
_____
_____

Thank you for completing this survey

End of Evaluation Report