THE WINSTON CHURCHILL MEMORIAL TRUST FELLOWSHIP

Report by Steven Wells, 2015 Churchill Fellow

To research the development, use and management of therapeutic gardens in healthcare settings

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Signed: Steven Wells
Dated: 18th September 2016
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INTRODUCTION

As a nurse clinician, horticulturist and horticultural therapist within the healthcare system for many years I have developed therapeutic gardens, and have experienced, observed and enjoyed the significant benefits that a connection with the natural world can achieve for people while they are within hospitals. It is well acknowledged that our environment can impact our health and wellbeing, and therapeutic gardens can play a valuable part in the delivery of holistic healthcare.

The nature of the fellowship project was to explore best practice therapeutic gardens in healthcare settings and to observe the processes involved to develop, use and manage them. The Churchill Fellowship involved visits to hospitals and healthcare support facilities in Singapore, the United Kingdom and the USA. The objective was to gather learnings that could be utilised within the Australian context and provide valuable information to ensure that therapeutic gardens are developed to be a worthwhile, valuable and sustainable component within healthcare settings.

I gratefully acknowledge the generosity and support of The Winston Churchill Memorial Trust of Australia for enabling me the opportunity to undertake my study tour. It is an honour to be granted a Churchill fellowship and it is an amazing opportunity to be supported to pursue knowledge in an area that I am passionate about and to then be in a position to share this information so that others may also be inspired within this field. To the many inspiring, passionate and knowledgeable individuals who met with me and also generously welcomed me into their workplaces during my fellowship study travels, I am truly grateful for your willingness and openness to share your knowledge and expertise.
EXECUTIVE SUMMARY

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My Churchill Fellowship was to research the development, use and management of therapeutic gardens in healthcare settings and to learn about the processes involved to ensure their longevity.

Therapeutic gardens in healthcare settings are designed to meet the patient’s physical, emotional and psychological needs and are often a component of a patient’s treatment goals and program. Therapeutic gardens can be one of or a combination of the following. Healing or restorative gardens designed as retreats; therapeutic treatment gardens designed with elements to assist health staff address patient goals; and horticultural therapy gardens designed to facilitate horticultural activities that assist with treatment goals.

Healthcare environments are synonymous with times of stress, anxiety and uncertainty of individual’s health. Therapeutic gardens within hospitals are sought to provide solace, respite and recovery by patients, their families and staff. There is an increasing awareness within the healthcare industry of the value of therapeutic gardens within the provision of a holistic healthcare approach. Challenges lay in the funding, development and management of these gardens in order for them to be suitably managed and sustained.

My study tour provided the opportunity to visit exemplary locations and to meet with experienced and passionate people in Singapore, the UK and the USA. There were many highlights and commonalities with different lessons learnt from each location. The exemplary hospitals with quality therapeutic gardens were those that understood that the internal and external environments of healthcare facilities are equally important for the client’s health and wellbeing. Hospitals that included a strong collaborative approach during the design stage had the most successfully implemented gardens that enabled longevity and sustainability of the gardens, which in turn increased their usage, value and effectiveness. This approach also facilitated increased community involvement and support through funding and volunteer engagement. Quality indeed begets quality. Hospitals that integrated therapeutic gardens with healthy lifestyle choices, horticultural therapy programs and health messages for their clients and staff were more successfully engaged with and maintained. Therapeutic gardens are funded universally via external funding largely from donors. Hospitals that included a maintenance endowment component in the total project costs at the initial funding stage were also the locations that had successfully maintained gardens. Therapeutic gardens that are developed at the entry interface of hospitals achieved a greater use, appeal and overall benefit.

Australia can learn from these findings and as a keen believer of sharing learnt knowledge the learnings from my Churchill Fellowship will be disseminated broadly to clinicians, designers, architects, horticulturists, healthcare administrators and students. I will also present this information at conferences, through media opportunities and within the healthcare, horticulture and architecture industries. I am also keen to establish a therapeutic landscapes network.
## PROGRAMME

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Khoo Teck Puat Hospital, Alexandra Health, Singapore

Meeting attendees:
Rosalind Tan – Senior Executive, Operations Department

Khoo Teck Puat Hospital (KTPH) is managed by Alexandra Health and is a 550-bed general and acute care public hospital in Yishun, providing a comprehensive range of medical services and specialist care. It opened in 2010 and was built with government funding.

I was very keen to visit this hospital because it is an exemplary model of the entire facility being designed as a therapeutic healing environment with greenery and garden spaces being integrated throughout. The gardens are an important element integrated into its design and as such it has won many design and green initiatives awards.

The hospital was designed to incorporate extensive garden spaces that create a healing environment based on the philosophy that “nature would nurture”. Integral to the design was the desire to create a hospital that was not restricted to conventional hospital layouts. As such, KTPH’s facilities incorporate three towers that overlook a large central garden courtyard, with rooftop gardens, the main entrance landscaped with gardens, and patient wards with planter boxes. The gardens include a diversity of vegetation suited to the tropical climate, fish ponds and numerous seating spaces. Balconies along the buildings incorporate climbing plants that fill the large inner courtyard with a mass of greenery. Additional to patients getting benefits from the gardens, members of the local public come to the hospital to exercise and enjoy the environment.

This is a facility that also has a strong focus on biodiversity, urban farming and eco-friendly principles. Large signs showcase numerous butterflies, dragonflies and fish that have been observed within the hospital grounds since its development. The rooftops accommodate significant productive urban farming spaces where vegetables, herbs and fruit are produced that are shared with the hospital’s kitchen for patient meals and also sold during the week to staff, patients and locals at a produce stall.

Rosalind Tan has been integral in the development of the garden spaces throughout the hospital. Rosalind had worked as an Occupational Therapist for 20 years at the Alexandra Hospital before becoming heavily involved with the development of the gardens for this new facility. She is incredibly passionate and committed to the gardens and successfully shares the various benefits that they provide. Copious amounts of articles have been written about the gardens and her dedication and passion to sustaining them as well as the hospital being awarded for its design and environmental success. Her influence and involvement has been integral to the gardens success and with connecting staff, patients and the community to the gardens.

Maintenance of the general garden spaces is performed by external contractors with funding from the hospital budget, with the urban farm rooftop gardens maintained by volunteers from the community.
Key learnings

1. The integration of gardens into the hospital was a decision made at the beginning of the design process and was a key focus.
2. Management led the decision
3. Biodiversity, ecological and environmental benefits were central factors
4. Design and layout was central with regards to incorporating gardens – internal/central courtyard, views from all three buildings look onto this central area, patients/visitors/staff have easy access to them
5. Linkage with local community – designed in such a way that local residents integrate with the facility and the gardens
6. Integrated health messages – humans and environment (ecological, biodiversity) fostering healthy lifestyle choices
7. Employing a designated staff member to be the Garden Manager who directs garden maintenance contractors, manages volunteers and communicates the benefits of therapeutic gardens widely to the hospital and public community

Khoo Teck Puat Hospital has three main towers with a large central courtyard that is filled with vegetation and layered along all balconies and walkways to provide planting at the main thoroughfare levels.
A view across the central courtyard gardens looking at one of the inpatient towers

The rooftop accommodates significant productive urban farming spaces where vegetables, herbs and fruits are managed by volunteers. Produce is sold at on-site market stalls during the week.

Health messages incorporated in the facility
Rosalind Tan standing at one of the markets
While visiting Singapore I was also interested to visit the newly opened Therapeutic Garden at HortPark. Part of National Parks public gardens HortPark is a large garden resource centre that brings together gardening-related, recreational, educational, research and retail activities within one park setting. The Therapeutic Garden is Singapore’s first therapeutic garden in a public park and has been designed to incorporate elements and user-friendly features that aim to meet the needs of the elderly, people with dementia and also people post-strokes. As a sensory and therapeutic garden it also aims to provide respite for visitors of all ages. It aims to bring in people from the community to engage with the garden and gardening activities for improved health. This new garden aims to serve as a reference for more therapeutic gardens across Singapore.

I had the chance to meet later with National Parks staff and be shown around the gardens after the official opening. The gardens provide sensory engagement opportunities, various areas to relax within, fixed exercise machines and areas where people can undertake supported gardening activities. The inclusion of raised garden beds, purpose built tables and large open spaces facilitate the use of the space by those with reduced mobility or in wheelchairs. The garden is filled with a variety of vegetation; bright flowers, fragrant plants, textural variety and a lushness of planting. As well as providing physical activities for people, the garden encourages sensory enjoyment, visual and memory stimulation and helps to uplift people’s mental well-being.

While visiting I was invited to present to National Parks staff about the horticultural therapy and therapeutic garden design work that I do. I was also invited to give a short impromptu presentation on two occasions for a two-day therapeutic garden design course that was being presented by Tara Cochrane-Graham, a Landscape Architect and colleague from Adelaide, Australia.

The inclusion of various purpose built tables and raised garden beds enable easier access to the gardens by visitors to the therapeutic garden
Maggie’s Centre, West London, UK

Meeting Attendees:
Bernie Byrne, Centre Head
Rose Creeser, Therapeutic Horticulturist

Maggie’s Centres are facilities that provide free practical, emotional and social support to people with cancer and their family and friends, following the ideas about cancer care originally laid out by Maggie Keswick Jencks. There are 17 Centres at major NHS cancer hospitals in the UK, online and abroad. The facility in West London was designed to minimize the impact of the adjacent Charing Cross Hospital and opened in 2008. In all aspects it aims to create an environment that feels more akin to a home rather than a hospital. No signs adorn walls, friendly staff greet visitors with no name tags and the open airy plan of the building feels welcoming and provides good connections with the various garden courtyards and vistas.

Designed by landscape architect Dan Pearson, the gardens help to soften the built environment, providing connections with nature via a series of small garden courtyards and rooftop spaces. These various small garden spaces are predominantly used for moments of respite or planned gardening activities. The bright coloured walls are complemented by the lush plantings. Unfortunately, I didn’t manage to meet with Bernie, but I was able to meet with Rose who maintains the gardens and manages the garden activities.

A central enclosed courtyard provides a sanctuary space that overlooks the entry garden.
Horatio’s Garden, Salisbury District Hospital, UK

Meeting attendees:
Tanya Kenyon, Volunteer Gardener

Salisbury District Hospital is located in southern England and provides a wide variety of clinical care to approximately 240,000 people regionally. The hospital is a publicly funded health care system through the National Health Service (NHS). The Duke of Cornwall Spinal Treatment Centre at Salisbury District Hospital covers most of southern England and Horatio’s Garden was created for the spinal care unit. This is a quality example of a therapeutic garden that has successfully incorporated good design principles, funding models, volunteer engagement and therapeutic horticulture programs.

Horatio’s Garden is a charity set up to create and care for accessible gardens in NHS spinal injury centres. The charity is named after Horatio Chapple, a schoolboy who volunteered at the spinal centre in Salisbury prior to his tragic death at the age of 17. It was Horatio’s idea to create a garden and his legacy continues to help spinal cord injury patients and their families.

The first Horatio’s Garden opened in 2012 and was designed by Cleve West. Created to offer areas for respite and communal engagement activities for individuals and families it also provides areas for therapeutic horticulture programs that include a hothouse and raised planters and benches for patients to engage in garden activities. The surfaces are wide and continuous with no joining bumps that impact on wheelchairs or beds when moving through the space which is important for spinal patients. A richness of planting diversity suits the climatic seasons and the design incorporates perimeter screening to provide enclosure while still allowing distant views over the countryside. Symbolism within the design in the low walls reflects the linkage to spinal cords.

There was a lot that impressed me with this garden and all that was involved with it. The Horatio’s Garden charity is a separate entity to the hospital. Due to the commitment of many volunteers, including the board of trustees, nearly 90% of all raised funds go directly to their charitable objectives. The charity organises rehabilitation activities including garden therapy, art therapy and music concerts. Seasonal food and plant fairs assist with raising funds as well as specialized garden events with live music, barbeques, plant sales and champagne receptions. Homewares, art, craft and clothing items are sold throughout the year. Paid garden tours are provided. Plants are propagated by volunteers and patients and sold at the fairs. They have an active presence on social media through Facebook, Instagram and Twitter. It has extensive promotional and marketing materials that present very well and have a patron, The Countess of Radnor, who is involved in all aspects and is a volunteer. The garden has been included in the National Garden Scheme, which is a fundraising charity.

The charity’s volunteer team, led by a paid part-time head gardener and an events/volunteer coordinator, manages the volunteers that maintain the gardens and coordinate the garden program and activities. The success of Horatio’s Garden at Salisbury has meant that the charity is now developing further gardens at other spinal cord injury facilities across the UK and additional garden designers are keen to be involved with these projects. Another accolade for this charity is that it has been the charity of choice for both the National Garden Scheme and the Telegraph Christmas appeal raising significant funds.
Key learnings
1. Dedicated charity established to raise funds and care for the gardens
2. Successful volunteer program that supports patients to use the garden, to manage the gardens, run fundraising events, produce support materials for patients.
3. A notable patron
4. Gardens designed by well-known and experienced designers.
5. Active garden program for patients
6. Well planned marketing, promotional and fundraising strategies

Horatio’s Garden incorporating wide paths, lush gardens, a glasshouse and raised planters
Horatio’s Garden incorporating shared seating, smooth pathway surfaces and arbours

"While we have been in the spinal unit Horatio’s Garden has been an oasis of peace and calm away from the noise and daily happenings in the ward. The opportunity to spend time in the fresh air amongst lovely plants and watching butterflies and birds also enjoying the same space has helped both of us”

Chelsea Flower Show, London, UK

While in London I had the opportunity to attend the Chelsea Flower Show. This provided me with the chance to view the display stand of the Horatio’s Garden charity which they use for marketing, promotion and fundraising. This gives them a significant opportunity to raise the awareness of the charity and seek funds at one of the most prestigious garden shows, thereby providing them with the opportunity to engage with the broader public, notable garden designers and the possibility of greater horticultural media opportunities.

Aside from this was the opportunity to view two show gardens that will be relocated to hospitals following the event and were specifically designed to promote and foster health and wellness. This was of particular interest for me as I was keen to observe the connections between the horticultural and healthcare industry in this context. The Morgan Stanley Garden for Great Ormond Street Hospital was designed to serve as a quiet retreat for families whose children are undergoing treatment at the hospital. Designed by Chris Beardshaw and sponsored by Morgan Stanley, the garden will be relocated essentially as is, with the exception of removing the water feature and large art works, to the second floor rooftop surrounded by other buildings. Design input came from hospital staff with the directive being a need for a contemplative space within the current harsh built environment.
The St John’s Hospice Garden: A Modern Apothecary, was designed by Jekka McVicar and was filled with research-based medicinal and healing plants known to be beneficial to the health and wellbeing of society. It will be relocated to the hospice which provides specialised palliative care, and will be a place of quiet reflection and a tranquil oasis of calm outside patient bedrooms and clinical areas. It will be expanded in size, with some changes to the surfaces for improved access and use. It was of particular interest to speak with the designers and to hear of their interest in designing gardens that will have a more lasting and meaningful impact.

Key learnings:
1. Public awareness of the value and benefit of gardens in hospitals is increasing
2. The importance of the horticultural industry and healthcare industry making connections
3. Notable garden designers engaging with healthcare settings
4. Utilising garden shows to raise the awareness of gardens in healthcare settings

Horatio’s Garden Charity stand at Chelsea Flower Show

The Morgan Stanley Garden for Great Ormond Street Hospital
The St John’s Hospice Garden: A Modern Apothecary
Howard Ulfelder Healing Garden, Massachusetts General Hospital, Boston, MA, USA

Meeting attendees:
Lisa Goggin, Project Coordinator, Massachusetts General Hospital Cancer Center
Rob Adams, Principal, Halvorson Designs
Dr. Richard Penson, Clinical Director, Medical Gynecologic Oncology

Massachusetts General Hospital (MGH) is the original and largest teaching hospital of Harvard Medical School and it has consistently been ranked among the top hospitals in the United States. A 999-bed medical centre, MGH is a founding member of Partners HealthCare, an integrated health care delivery system that includes community hospitals, primary care and specialty physicians, specialty facilities, community health centres and other health-related entities.

The Howard Ulfelder Healing Garden is a rooftop garden located on the 8th floor of the Yawkey Center for Outpatient Care. Designed by Halvorson Design in collaboration with architect Cambridge Seven and hospital staff, the garden provides year-round respite for the Cancer Center patients, families and friends and is open for use by the entire hospital. The garden was not part of the initial new building and was built towards the end of its construction. As such significant additional structural support work was required to the building to ensure that this retrofit garden would be achievable and maintainable. Opened in 2005, this garden is a very successful example of a therapeutic garden space in a hospital that has stayed true to its initial design intent.

The entrance to the garden is via a passageway and creates a strong sense of reveal as it opens onto a glassed pavilion that overlooks the garden, the Boston skyline and the Charles River. Designed to be a garden that is quite calming, peaceful and enriching, the plant selection successfully suits seasonal changes of winter snow and summer heat and provides a lush rooftop space. The garden includes significant trees with low shrubs that surround a central lawn area with a water feature and some movable furniture.

The garden was funded from donors managed through the fundraising department with ongoing financial support coming from the Friends of the Cancer Center group. Donor plaques are located in the garden and are suitably worded to acknowledge donation without being memorial focused. The hospital management understand the value in developing and supporting this therapeutic garden and see it as part of providing quality healthcare. Dr. Penson talked about the major psychological, physical, spiritual, and social themes expressed by garden users in the visitor book. Comments were overwhelmingly positive and the collated comments provided highlights into the value and benefit of this garden.

The pavilion provides a space for patient workshops of tai chi, music therapy, yoga and quiet sitting for views onto the garden. The garden is often filled with patients, visitors and staff and it is used occasionally for memorial services or after hours staff meetings. The garden is only accessible during office hours for management and safety reasons.

Maintenance is undertaken by external contractors with storage space concealed onsite to avoid equipment needing to be brought through the hospital and minimal waste needing to be removed.
Key learnings:
1. Collaborative design between architects, landscape architects and hospital staff achieves effective, sustainable and maintainable therapeutic gardens
2. Fundraising department engaged with project
3. Good design, planning and plant selection is paramount in successful long term projects
4. Research through visitor comments book provides valuable insights into benefits of garden

Howard Ulfelder Healing Garden provides a serene garden environment on the 8th floor rooftop
Spaulding Rehabilitation Hospital, Boston, MA, USA

Meeting attendees:
Paula Hereau, Vice President Hospital Operations
Sean Sangar – Principal, Copley Wolff Design Group

Spaulding Rehabilitation Hospital is the flagship institution of the Spaulding Rehabilitation Network that is part of Partners HealthCare. With a 132-bed capacity it is one of the largest inpatient rehabilitation facilities in the US and consistently ranks highly in the Best Hospitals category. It provides comprehensive rehabilitation treatment to providing designated units for stroke, comprehensive rehab, burn, spinal cord injury, traumatic brain injury and paediatric programs. It was opened in 2013 and is Certified LEED Gold for its commitment to renewable energy and sustainability and it also is a national model for inclusive design. Located on the banks of the Mystic River its design incorporates views along the river and ease of access through the site by the community.

The design process by Copley Wolff Design Group involved collaboration with physiotherapy staff to develop an understanding of how the external environment could incorporate a therapy context. What resulted was the exterior component of the hospital being designed as part of the healing process. The development of a therapeutic garden therapy trail as an active and positive space enables patients to utilize varying surfaces, inclines and steps and various additional sections assist patients to do exercises for their rehabilitation. Unique to this location is the fact that all of the ground level garden spaces are open public spaces used by local residents as well as hospital users, as local law dictates that all buildings along the waterfront need to have 70% public access.

The various garden sections were developed during the building phase with the majority of gardens and furniture being funded by donors. The Therapy Trail is the front interface of the hospital with the public walking trail along the shoreline and as such needs to be both functional and aesthetic. Elements included steps with railing, ramps with railing, timber boardwalk, gravel, open stone as pavers, mortared pavers, flat concrete, and grass and all seating is fixed. The physical active zone included a golf area and walls with fixed physical movement activities.

The plant selection was based on low maintenance criteria that could tolerate seasonal differences of snow and summer heat, but still includes a diversity of plants and flowers, with bulbs incorporated to highlight the emergence out of the drab winter. Proportions are 60%/40% deciduous/evergreen. Garden maintenance is undertaken by external contractors and the maintenance brief includes maintaining existing plantings and replanting as required. The new facility design was decidedly more plant focussed then the previous site with more maintenance costs which the organisation was prepared to budget.

Additional to the ground level gardens are small podium gardens adjacent to the main physiotherapy gym with additional raised planters for use within the intermittent therapeutic recreation program focussed on herbs and vegetables for the cooking groups.
Key learnings
1. Collaboration with landscape architects, architects, hospital therapy staff at the design stage
2. Therapeutic gardens being the public interface to the hospital
3. Fundraising department significantly involved with sourcing funds for the gardens

The Therapy Trail is located at the front interface of the hospital with public access

Therapy Trail includes various elements designed for patient rehabilitation treatment
Serenity Garden, Kent Hospital, Warwick, RI, USA

Meeting attendees:
Tom Benjamin, Landscape Architect, Wellnesscapes
Cynthia Wood, Director, Facilities Maintenance, Kent Hospital
Joanne Carlson, Nurse Manager, Infusion Unit Cancer Center, Kent Hospital

Kent Hospital is a community teaching hospital and was a founding member of the Care New England Health System. I was keen to see this location not just for the Serenity Garden project but also the large focus it has had on sustainable planting and management for the entire site.

I met with Tom Benjamin who had previously been the hospital’s landscape architect and project manager for over a decade. During that time Tom significantly transitioned the facility’s landscapes to a sustainable landscape model. Following the development of a master plan, extensive work was undertaken to document, develop and maintain numerous landscaping projects that included bio-retention swales, rain gardens, water management, the Serenity Healing Garden, a staff vegetable patch, and numerous general gardens throughout the facility. This project has been recognized as a regional model for integrating human wellness with environmental health and has won four design and sustainability awards. The facility is located within the coastal zone, and as such the initial driver for improving the site was influenced significantly by the need to meet environmental conditions around storm water management for all new building development as directed by the State Coastal Agency and the Department of Environmental Management.

Tom also worked with existing staff to educate about the plant material and maintenance processes to ensure plant survival. Planting selection incorporated indigenous plants with continuity and repeat planting to aid maintenance. During my visit it was noted that the organisation’s maintenance capacity had reduced, however the strength of the previous planting and work was still strongly evident and successful. With the evident changes, it was encouraging to hear that the organisation recognised that for long-term garden success, new maintenance staff need to have knowledge of plants through horticultural qualifications, rather than only basic garden maintenance skills. A sustainable landscapes and walking tour guide brochure for patients and staff was developed to encourage the health and well-being message and promote connections with nature.

The Serenity Garden was created specifically for the Infusion Unit Cancer Care on a small and challenging site. Funded with a small budget as a capital project and with additional private donations, the garden provides a small sanctuary space for cancer patients and their families. The simple layout and sustainable planting plan provides individual and group seating options. Access is only via the cancer treatment building. Patients frequently use the space, even during treatment, family members utilise it as a stress management strategy and staff get inspired by the garden. Maintenance of this space is undertaken by contracted staff and occasional volunteer groups.
Key learnings

1. Sustainable landscape management is an important component of therapeutic gardens
2. Ongoing funding and management directive is crucial for sustaining landscapes
3. Integrated health messages – humans and environment (ecological, biodiversity) fostering healthy lifestyle choices
4. The value of a garden master plan transcends changing administrative management

The Serenity Healing Garden located outside the Infusion Unit Cancer Care

“We are marrying environmental health with human wellness” Tom Benjamin

Staff vegetable patch that also accommodates for snow management in car parks

Part of the sustainable landscapes and walking tour guide includes physical exercise stops
Joel Schnaper Memorial Garden, Terence Cardinal Cooke Health Care Center, New York City, NY, USA

Meeting attendees:
Donna Arabian, Therapeutic Recreation Specialist
Tom McDonald, Director of Recreation
David Kamp, Principal, Dirtworks Landscape Architecture

The Terence Cardinal Cooke Health Care Center (TCC HCC) is a not-for-profit organisation managed by ArchCare that delivers long term care, short-term rehabilitation care and other vital health services to people with diverse health and social needs with a 600 bed capacity. Located in the East Harlem community across from Central Park in New York City. Unfortunately, David Kamp was unavailable however TCCHCC staff provided information regarding the garden.

The Joel Schnaper Memorial Garden was built in 1994 to serve individuals with HIV/AIDS and their caregivers and was funded entirely from donations and volunteer labour. Designed pro-bono by David Kamp, David continued his involvement as it has evolved over the years. Located on the 6th floor, this rooftop garden was designed to be an oasis of peace and tranquillity. The layout is open plan with all plants located in large lightweight planters that support a variety of arbours, creepers, trees and shrubs. Fixed shelters and various movable seats provide options for open and enclosed seating areas. It was also developed to facilitate a horticultural therapy program coordinated by the Therapeutic Recreation department who also maintain it through the garden program.

The changing nature of medical care and treatment for HIV/AIDS has reduced this population being treated at the hospital and the current patient cohort includes psychiatric disorders, lifestyle issues, drug abuse and the homeless. This has impacted the care and support programs that the hospital provides and changed the garden use by patients who require staff supervision at all times. The garden has now become more so another room for playing games, sitting outdoors, an event space and occasional barbecue meals, rather than being used for gardening activities.

There have been challenges for the garden, with past building upgrades necessitating the garden to be totally rebuilt, however the positive of that was the decision by management to retain the gardens. Currently future building plans present a challenge as scaffolding remains within the garden impacting on its use. Possible future plans to the whole hospital include relocating the gardens to the 10th floor, which could be facilitated easier given the current decision to use lightweight planters. Funding remains an issue, as past sources for funding from the community have changed. Funding for any new gardens comes from one-time funding, with no ongoing inputs to sustain and maintain. New garden spaces developed recently from donations appear to have been installed without collaboration with staff that use these spaces with the patients as they don’t appear to be easily accessible, sustainable or maintainable. Historically the gardens were meticulously looked after, had more residents involved, had more staff involved, however with changing demographics and funding, the gardens are not in their prime. While there have been changes to this garden space, one of the significant successes is that it still remains and that these residents, who are an under-served population, have access to an outdoor garden space, which is something that they would not normally experience. It provides a quality of life for them and brings them above the level than they had before.
Key learnings:
1. Engagement of professionals in development of gardens in challenging locations
2. The importance of community engagement for funding and developing gardens
3. Challenges lie in long term garden management when funding changes
4. The changing nature of hospital sites impacts therapeutic gardens if they are not supported or deemed of significant importance by hospital management

The Joel Schnaper Memorial Garden

NYU Langone Medical Center, New York City, NY, USA

Meeting attendees:
Matt Wichrowski, Senior Horticultural Therapist, Clinical Assistant Professor

I had the opportunity to meet up with Matt to discuss the horticultural therapy cart program that he coordinates at the Langone Medical Center. The facility previously had a therapeutic garden, the Enid A. Haupt Glass Gardens, where horticultural therapy programs were facilitated, however these gardens were removed during hospital expansion. Subsequently the horticultural therapy program now only runs the portable cart program which happens at the bedside.

Key learnings
1. Horticultural therapy cart program is facilitated at the bedside within the clinical wards.
2. Gardens and plants linked to patient education programs, especially diabetes management programs.
The Northeast Georgia Medical Center (NGMC) Gainesville is one of two campuses of the Northeast Georgia Health System and is a not-for-profit community health system offering a full range of healthcare services. This facility is an exemplar for the development of therapeutic gardens due to the various processes put in place.

Foremost is the approach of the hospital management that recognizes that healing goes beyond the bedside. Its goal was to create outdoor environments to promote hope and healing for patients and families, visitors, staff, and the community at large. The decision to locate these environments at the entry interface of the facility was also paramount to their success, their use and the positive impact experienced by the users and the perception they then have of the facility.

Four therapeutic gardens have been installed following the construction of a new North Patient Tower building in 2008. The collaboration of hospital management, the landscape architects at HGOR and the local landscape design and construction company The Fockele Garden Company (TFGC) enabled the development of these gardens. Conceptual plans were developed around the nature of each garden, including photos of other gardens, imagery, detailed costings and a written overview of what that garden aimed to achieve. These were then formatted into quality marketing material to assist with seeking donors for use by the hospital’s fundraising Foundation. Once a donor was secured and the gift made then the more detailed design and documentation process occurred by TFGC with the donor included in some of the projects. A maintenance endowment component was an exceptional inclusion of the overall costs that covers ongoing general maintenance into perpetuity for each specific garden. This is an uncommon concept but one that has greatly assisted in the ongoing success of the gardens.

The NGMC Foundation is funded by the hospital. The hospital management invest in the planning process managed by the Medical Center Foundation to ensure it is successful. This is a direct result of the Foundation educating them of the need to develop conceptual designs, documentation and costings in order for donors to come on board to fund the therapeutic gardens. The Foundation also seeks donor funds for longer term maintenance. A success of these therapeutic gardens is the strong long term relationship between the hospital and TFGC who are committed to the organisation and the local community.

This was a new building, and importantly prior to developing each therapeutic garden, the identified spaces were landscaped very minimally with just lawns. This ensured a more effective transition to the new gardens as donors and staff could see the need for therapeutic gardens to be installed.

Some of the gardens are located at the entry interface of the hospital which is a significant aspect of their success. They are easily visible, locatable and accessible by patients and families and as such they are used frequently. The individual gardens are Anne’s Garden (opened 2008), the
Wilheit-Keys Peace Garden (opened 2011), Nell’s Prayer Garden (opened 2012) and the Pope Family Garden (opened 2013). With the exception of Anne’s Garden, which was funded from 140 donors, they were single donor funded gardens. Additional to these therapeutic gardens are The David Pet Garden (opened 2015) and the Auxiliary Love Light Garden. Maintenance for these gardens is undertaken by TFGC, the company responsible for the design and construction.

An opportunity to be interviewed for the local paper, The Times, was also arranged during my visit. This was another valuable opportunity for all of us to get the message out about the value and benefits of therapeutic gardens in hospitals.

Key learnings
1. Hospital management commitment to the development of therapeutic gardens
2. Maintenance endowment that covers ongoing garden maintenance, new plantings and furniture replacement
3. Collaborative design approach
4. Design, concept and documentation planned prior to seeking donor gifts
5. Fundraising Foundation involved with developing gardens and ongoing garden developments
6. Therapeutic gardens located at the main hospital entrances
7. Ongoing relationship between hospital and the landscape and design company
The Wilheit-Keys Peace Garden, opened 2011

"I've had a tough week and these gardens have meant a lot to me" "the other day at 3am I was being advised to turn off all of my husband’s machines. This is not about me, but him. I came and sat in these gardens and realised that he and his maker aren't done yet. The next day he was stable. But it’s one day at a time", Garden visitor

Nell’s Prayer Garden, opened 2012

Views onto the gardens from the passageways
Meeting attendees:
Teresia Hazen, Therapeutic Gardens Coordinator and Horticultural Therapist
Brian Bainnson, Landscape Architect, Quatrefoil, Inc.

Legacy Health is a not-for-profit health care network with multiple hospitals and a specialised children’s hospital in Portland and surrounding areas. I was very keen to visit this location as it is an exemplary organisation for therapeutic gardens, horticultural therapy and research within this field.

Legacy Health has developed six therapeutic gardens across four hospital sites. The gardens and sites are the Legacy Emanuel Medical Center - Legacy Oregon Burn Center Garden, Emanuel Terrace Garden, and The Children’s Garden; Good Samaritan Medical Center - Stenzel Healing Garden; Meridian Park Medical Center- Lewis & Floetta Ide Healing Garden; and the Mount Hood Medical Center - Healing Garden. These have all been significant projects and have followed the consistent and structured Therapeutic Garden Design Team process involving a three one-hour meeting format based on therapeutic garden characteristics developed by the Legacy Health team. This collaborative interdisciplinary process has enabled the successful installation of therapeutic gardens that support the clinical programs and meets the needs of their clients, families, visitors, staff, and community. This process provides a transferrable and replicable format for the hospital and also for other organisations. There is a consistency of design themes within the gardens with regards to the inclusions of nature education and health improvement however each garden has its own design that suits its site and the needs of those using it. All gardens are extensively used by patients, families, visitors and staff.

Legacy Health administration acknowledge the importance of the gardens and support the Foundation who seek funds for the gardens. All therapeutic gardens are funded from donors, either many individual donors or single donors. The exception to this is the Legacy Emanuel Terrace Garden which was funded from the TKF Foundation which awarded a $560,000 Open Spaces Sacred Places grant to fund the garden development, to conduct clinical-outcome research about the benefits of therapeutic gardens and to contribute to the body of knowledge in evidence-based design.

The development stage for the gardens can take many years to ensure that all processes are covered and funds achieved prior to development. Fundraising is ongoing for each site to seek funds for the gardens once established in order to sustain the maintenance endowments. Naming rights for a garden are for the significant single donors and the inclusion of plaques and inscribed bricks acknowledge other individual donors. Gardens have been designed by landscape architect Brian Bainnson of Quatrefoil Inc. which has provided a consistent, successful and valuable collaboration.

All gardens are located within the building envelopes with the exception being the Mount Hood Healing Garden which is located at the main entry interface to the hospital. The Legacy Emanuel Terrace Garden is a retro-fitted roof top garden and the research project is currently being undertaken by Professor Roger Ulrich. The garden has been built and the benefits of the garden are being evaluated by scientific studies about the value of gardens and nature for patients, families and health care workers.
For all gardens a full plan is put in place before any design work commences and a commitment from the inpatient care unit that the gardens will serve is determined. This commitment acknowledges that they want a garden and that they will stay involved in the maintenance input for the garden to provide guidance for future changes. All gardens go through a 2 year testing phase to check how things are going and provide input for any changes.

Consistent inclusions within these gardens are spaces for group gatherings and individual seating, open and sheltered seating areas, water features, artistic elements, a verdant selection of plantings that provide sensory engagement and foster wildlife habitat, and physical therapy areas with steps, ramps and rails.

Horticultural therapy programs are facilitated within the gardens and the extensive program is coordinated by Teresia Hazen. Her role includes working with clients, education of staff, students and interns, providing professional workshops, staff health workshops, community engagement through talks and presentations, undertaking garden activity events for staff and patients, and managing the garden volunteers who assist with maintaining the gardens. Her role aligns with the Human Resources department.

The garden volunteer program is extensive with allocated responsibilities for each person and expectations of their time and abilities across the week. Gardens are not run by volunteers alone with a portion of paid time allocated to keep the gardens working. As a general rule the garden maintenance planning is on a 20-year vision to keep the funding coming to maintain them.

An important element to the success of these gardens is that they are integrated into the healthy lifestyle message for patients and staff. They are not seen as an isolated entity which ensures their longevity and sustainability. The culture of good health and connecting with nature is the focus. Brochures of maps detailing walks in the gardens or nearby neighbourhoods are provided, gardens educate about biodiversity of nature, and staff wellness programs are run in the gardens, all of which promote more wellness and ill health prevention activities. The therapeutic gardens are one choice within the many choices that promotes good health.

Legacy Health shares all of this information on their website providing a detailed list of downloadable documents about therapeutic gardens - the design process, characteristics, benefits of gardens, horticultural therapy programs, and position descriptions.

Key learnings
1. Collaborative interdisciplinary design process
2. Horticultural Therapy program integrated into the gardens
3. Integrated health messages – fostering and promoting healthy lifestyle choices - gardens are not in isolation, linked with healthy lifestyle message and staff health programs
4. Design elements based on therapeutic design principles
5. Designated hospital staff member - “nature engagement officer”
6. Integration of research
7. Structured and detailed Garden Volunteer Program
8. Funding models
Legacy Health Mount Hood Medical Center – Healing Garden

“In healthcare you really need to think beyond the medicine. I think people need options for therapy and need to get outside of the hospital, and administration realise that too” Teresia Hazen

The Children’s Garden, Legacy Emanuel Medical Center

“Developing gardens is a better return on our investment than aftercare and chronic care”
Teresia Hazen
The Stenzel Healing Garden, Legacy Health, Good Samaritan Medical Center

Meridian Park Medical Center- Lewis & Floetta Ide Healing Garden
Meeting attendees:
Julie Brown, Registered Horticultural Therapist

Adventist Health is a faith-based, not-for-profit health care network consisting of the 302-bed Adventist Medical Center, and includes acute care, inpatient, outpatient, emergency and diagnostic services, medical clinics, home care and hospice services.

The Hope and Healing Garden was opened in 2007 as a unique therapy garden designed exclusively for the 43 bed adult psychiatric unit with the aim to be an outdoor tranquil oasis in a secure healing environment. It was designed through a collaborative approach with the interdisciplinary team including administration, ward staff, fundraising, a horticultural therapist, landscape architects and architects. The impetus for the development came from hospital staff, with initial initiatives implemented to help create a viewing garden, with subsequent engagement by the fundraising department to seek funds. The garden was funded from various fundraising events and also staff donations through pay role deductions. It was awarded a Therapeutic Garden Design Award in 2010.

It is an enclosed secure and safe garden that provides this client group with views onto the garden from patient bedrooms only with no other views onto it from surrounding buildings or the general public. The design includes wide accessible paths, varying heights of raised garden beds, edible and flower beds, native plant species that encourages biodiversity, habitat for humming birds and butterflies, and sheltered and open seating areas.

Patients use the garden daily with garden time programmed as part of their regular treatment program. The garden is used primarily for respite and restoration, offering fresh air and natural light. Doctors, social work, nursing staff and mental health therapists use the garden for patient care and all use is supervised. The horticultural therapy program occurs one day a week as part of the collaborative team program for patient treatment. Garden maintenance is undertaken by the horticultural therapy staff. Due to its thorough and successful collaborative design approach, maintenance costs are minimal and are funded from the hospital budget.

Of particular interest was the inclusion of the garden in the staff wellness program. Once a year the garden is open for staff to use at an annual anniversary open house celebration where they also hear about how gardens and gardening can provide them with healthy lifestyle habits and receive credit points. The relevance of this links to their health insurance because in the USA employers fund employee’s base level health insurance. At this facility, if staff wish to attain a higher level of insurance they need to accrue a specific amount of credit points attained from attending various healthy lifestyle focussed activities, education or events.

Key learnings:
1. Collaborative design approach
2. Design elements based on therapeutic design principles
3. Plant selection suited to long term sustainability and maintenance
4. Linkage to staff wellness programs and increased interaction through garden open days
5. Funding models that includes staff donations through pay deductions
Hope and Healing Garden, Adventist Medical Center

“It’s more important for the person to get into the garden and make mistakes, than not get out here and work at all” Julie Brown

Laguna Honda Hospital & Rehabilitation Center, San Francisco, CA, USA

Meeting attendees:
John Alexander, Head Gardener
Green Mann, Master Gardener volunteer
Cherryllyn Fernandes, Volunteer Coordinator

Laguna Honda Hospital and Rehabilitation Center is operated by the City of San Francisco and provides three distinct types of health care services; acute care, skilled nursing care and rehabilitative care and has served the community since 1866. I was particularly interested to see this facility because with the new redevelopment in 2010, eleven therapeutic gardens throughout the facility were included in the design. These included podium gardens, courtyards with easy access for residents, a glasshouse, walking meadows, productive vegetable gardens and orchards. A significant focus of the hospital redevelopment centred on creating a healing environment, both internally and externally, that fostered a sense of community and connectedness for the residents. The new hospital was a vast improvement on the previous configuration.
Only two dedicated garden staff manage the 62-acre grounds and volunteer master gardeners care for one particular garden linked with the Positive Care Unit. Despite their passion, enthusiasm and experience, this facility is unfortunately an example of what occurs when inadequate funding is available to sustain and maintain therapeutic gardens installed at the development stage of hospital facilities. What was designed to be an engaging garden environment surrounding the new hospital has now unfortunately become a challenging site primarily due to the lack of available funding and resources. Gardens haven’t been able to be sustained at the level they were at installation and development with maintenance focussing on areas that currently engage patients.

Key learnings
1. Ongoing funding and staffing resources are essential to sustain therapeutic gardens
2. Therapeutic gardens need to be designed to endure changing financial and management circumstances

Raised garden beds planted with seasonal flowers for colour and interest
While in San Francisco I had the opportunity to meet a colleague and visit the Cordilleras Mental Health Rehabilitation Center managed by Telecare, where she coordinates the horticultural therapy program. This facility houses two separate treatment programs for adults with chronic mental illness and also offers treatment options for persons who have substance abuse issues in addition to a serious mental illness. The mission of the horticultural therapy program is to engage the residents to improve their overall health and wellness. The productive and ornamental garden spaces have been developed over the past 9 years as funding permitted to provide opportunities for vegetable, herb and fruit production, to facilitate cooking programs, art projects, movement therapy and to develop vocational garden skills. With limited funding the program provides great opportunities for utilising the gardens for improved physical, emotional and psychological wellbeing and for building self-esteem and confidence of the residents.

Key learnings

1. Horticultural therapy gardens and programs to promote healthy lifestyle choices
Conclusions

The study tour provided the opportunity to visit exemplary locations and to meet with passionate, knowledgeable and experienced people. I observed many commonalities and similar challenges across these locations that resonated with the Australian context which highlighted that there are universal issues in developing therapeutic gardens across the world. However, the tour has importantly provided valuable learnings that can be implemented here in Australia to ensure that the inclusion of therapeutic gardens in healthcare settings is successfully achieved.

The conclusions that I have drawn from my research include the following:

- The hospitals that are successful in regards to utilising therapeutic gardens are the ones that understand that the internal and external environments of healthcare facilities are equally important for the client’s health and wellbeing.
- A collaborative design approach is the most successful format
- Where hospital management lead the desire for the inclusion of therapeutic gardens the projects are far more successful
- The challenges of funding are universal and that the development of therapeutic gardens relies on fundraising and donors
- When therapeutic gardens aren’t designed to be sustained they fail when funding is reduced and the maintenance capacity are reduced
- Therapeutic gardens that are developed at the entry interface of hospitals achieve a greater use, appeal and overall benefit
- Hospitals that have a designated staff member to oversee and drive the therapeutic garden development, use, management, volunteers, and garden staff have a greater success.
- Hospitals that focus on an integrated health message, either of fostering and promoting healthy lifestyle choices and/or of humans and the environment through biodiversity, have greater strength of purpose and longevity
- Established horticultural therapy programs facilitate active use and engagement of therapeutic gardens
- Volunteer programs can support the garden; through maintenance, being actively involved with fundraising events, and assisting with general garden engagement programs. Structured garden volunteer programs can complement horticultural therapy programs, be utilised to engage patients in the gardens and also to maintain the gardens where funded garden staff aren’t available
- Having a dedicated charity established to raise funds and care for the gardens provides successful results. The development of professional marketing, promotional and fundraising strategies greatly assists with attracting donors, supporters and volunteers
- Having a patron for the charity will assist with raising the profile of the gardens and also attract funds and supporters
Engagement with experienced landscape architects and/or garden designers ensures a greater long-term success for the design, use and management.

Having an ongoing relationship between the hospital and the landscape design company for ongoing projects ensures for continuity of design intent and management.

The inclusion of maintenance endowments at the initial fund sourcing stage enables ongoing garden maintenance, new plantings and furniture replacement to be covered.

Community engagement is vital for funding and developing therapeutic gardens.

Recommendations

The following are recommendations that I believe will make a difference for the ongoing development, use and long term sustainability of therapeutic gardens within healthcare settings.

- A collaborative design approach is necessary for the successful development of therapeutic gardens and needs to include hospital management, fundraising departments, healthcare professionals and landscape professionals.
- Healthcare facilities need to value the external and internal environments equally in the provision of client health and wellbeing and fund and manage them accordingly.
- Where external donor funding is required, the inclusion of maintenance endowments should be included in the initial project funding stage.
- Therapeutic gardens need to be integrated into the patient and staff healthy lifestyle programs and health messages.
- Establishment and incorporation of therapeutic horticulture programs within healthcare settings that link with the gardens and their ongoing use.
- The development of formalised and structured volunteer programs to support the therapeutic gardens through increased client engagement, ongoing fundraising activities and maintenance and strengthened community engagement with the organisation.
- The establishment of a national therapeutic landscapes network that engages professionals across this field, from healthcare professionals, landscape architects, garden designers, educators, researchers, and media. This would enable sharing of ideas and mutual support and facilitation of future projects and research and be an advocacy for the inclusion and value of therapeutic gardens and their benefits.
- Further research needs to be facilitated around the physical, emotional and psychological benefits of therapeutic gardens within healthcare settings.
- The inclusion of a staff role whose position who manages therapeutic gardens, staff and client engagement and garden volunteers and is in effect the “nature engagement officer”.

As a keen believer of sharing learnt knowledge the learnings from my Churchill Fellowship will be disseminated broadly to clinicians, architects, designers, horticulturists, healthcare administrators, students and the general public. This will be through avenues such as conferences, media, horticulture industry engagement, meetings, and public talks. I will also continue to collaborate with others within the field of designing, managing and using therapeutic gardens.