

THE ROLE OF HEALING GARDENS



OBJECTIVE

The overarching objective of this research is to expand the dialogue of the role of healing gardens in hospitals. In order to understand the role of healing gardens in hospitals, it is important to determine how and to what extent the healing garden is being used. By expanding this dialogue we can reaffirm the legitimacy of current approaches such as design criteria and the program. When the perception and role of healing gardens in hospitals is understood, research based design decisions can improve the quality of life for patients, providers, and visitors.

USE PATTERNS OF A HEALING GARDEN IN A PEDIATRIC HOSPITAL

METHODOLOGY

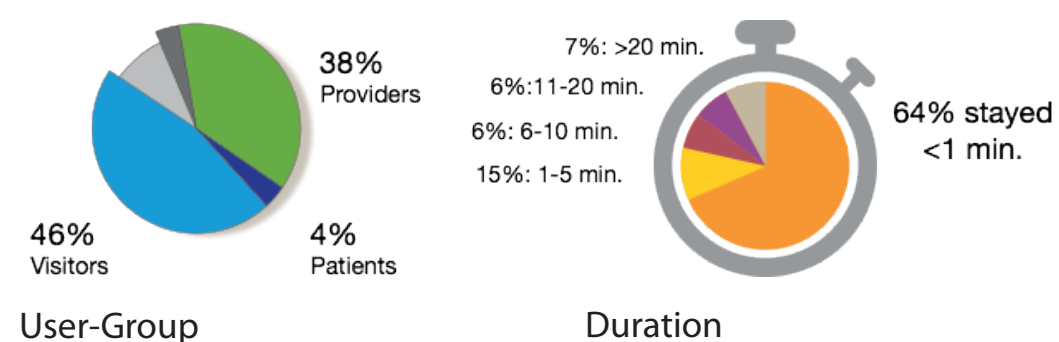
In collaboration with ZGF, a children's hospital was selected for its fairly recent completion (2012), design goal to merge hospitality and healthcare, and unique healing garden. The terrace garden was selected as the garden for some of its unique design intent and ability to monitor access. It is located on the third floor with programmed space for outpatient and infusion oncology. Each infusion bay has a window with views to the garden and access to natural daylight coming from the south. Terrace garden is only accessible to recognized patients, visitors, and providers of the children's hospital. It is open from 5am - 11pm every day.



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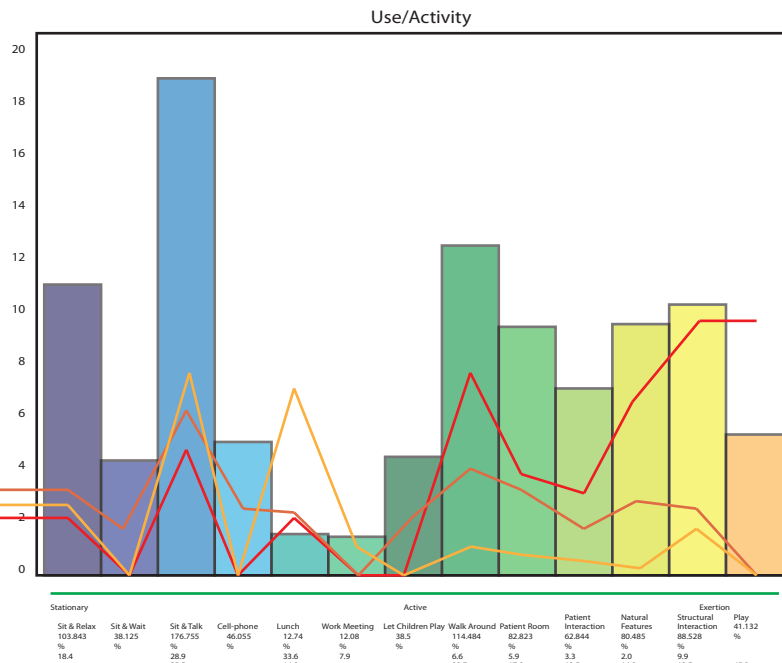
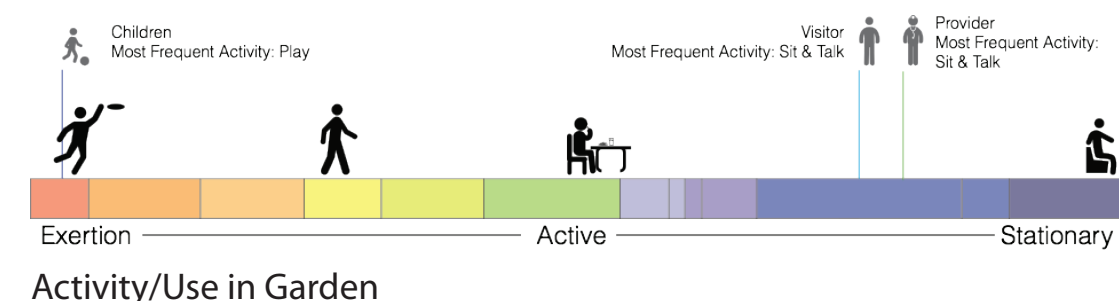
LITERARY RESEARCH

Three distinct groups of people may use or interact with a healing garden: the patient, the provider, and the visitor. Previous research recognizes and distinguishes between these three user groups. For example, a study of 1400 users observed 4% patient, 46% visitor, 45% staff, and 5% missing (Sherman et al, 2005). This study is typical for the general trend of user-group percentages within literary research conducted for the purpose of this research with 38% providers, 4% patient, 46% visitors, 7% non-patient non-hospital participants, and 4% with mixed/unknown user-group identifiers (figure 1). Cumulation of past literary research reveals 73% of users stay less than five (5) minutes inside a healing garden. 9% stay 6-10 minutes, 9.5% stay 11-20 minutes, and 6.8% stay over 20 minutes. While these averages accurately reflect the general length of stay trend, each study has slightly different results. For example, Fig. 2 shows the percentages of 276 users time in a healing garden observational study conducted in 2005 (Sherman 2005). These results have a greater percentage of users staying less than five (5) minutes than the literature review average, with the greatest majority staying less than one (1) minute.



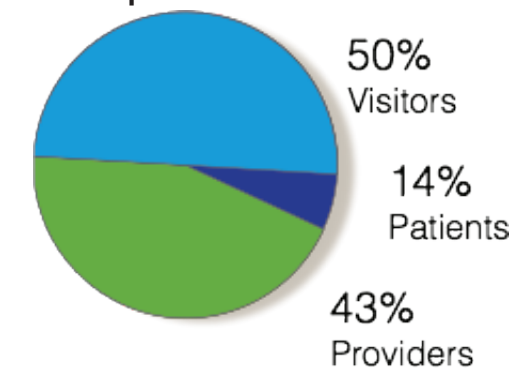
It is important to accommodate each of the user groups' activity based on ability, physical and emotional health, and desire. Previously recognized activities include: lunch, sit and talk, sit and relax, quick chat, structural interactions, work meeting, walking around, patient room, patient interaction, natural features, let children play, cell-phone, sit and wait, and play (Sherman et al., 2005). In figure 3, each differentiated bar represents the activity and frequency percentage in past research.

Activities have been organized from stationary to active to exertion. Children's most frequent activity is "play" while both visitors and provider's most frequent activity is "sit and talk." Additional uses can be passive in nature, where the user groups do not enter but view the healing garden from an interior space within the hospital. For the purpose of this research, passive uses are not recorded.

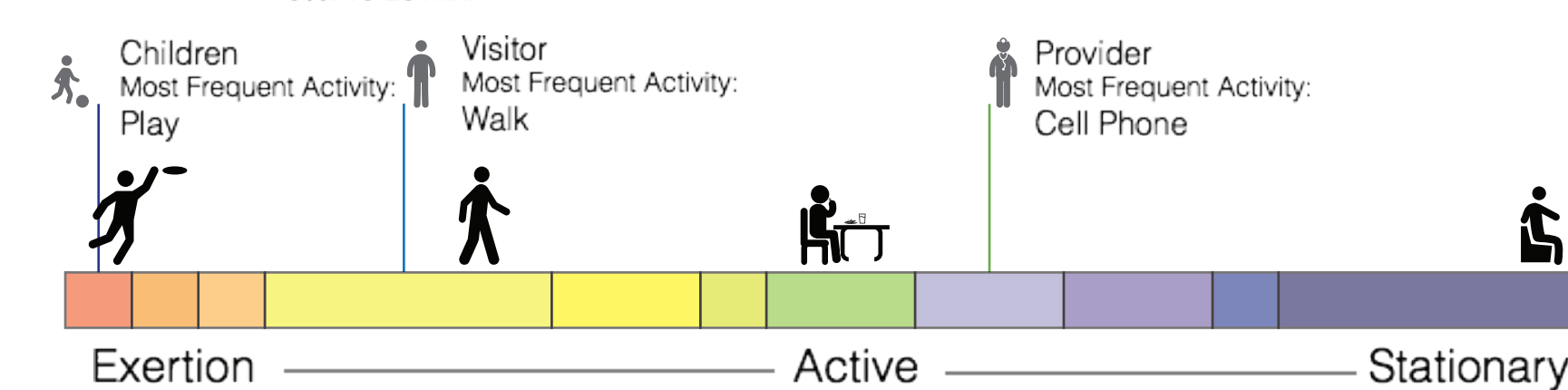
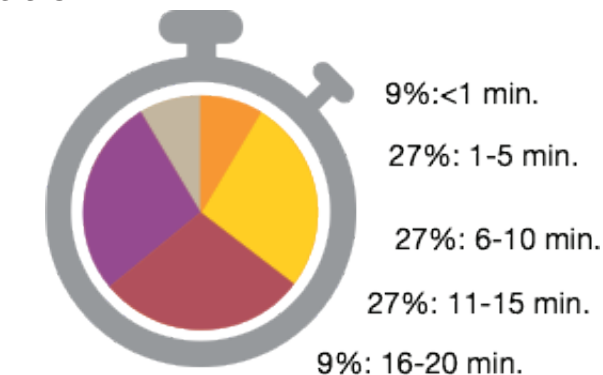


Methodology for finding information on the role/use/benefits of healing gardens was of particular focus for the literary portion of this research. The most common research methods are survey, semi-structured interview, and observation with physiological and literary methods less frequent but still present in the body of research collected. Physiological and literary methods were primarily conducted outside a healing garden setting, while surveys, interviews, and observation were done onsite or in close proximity to the healing garden.

User-Group

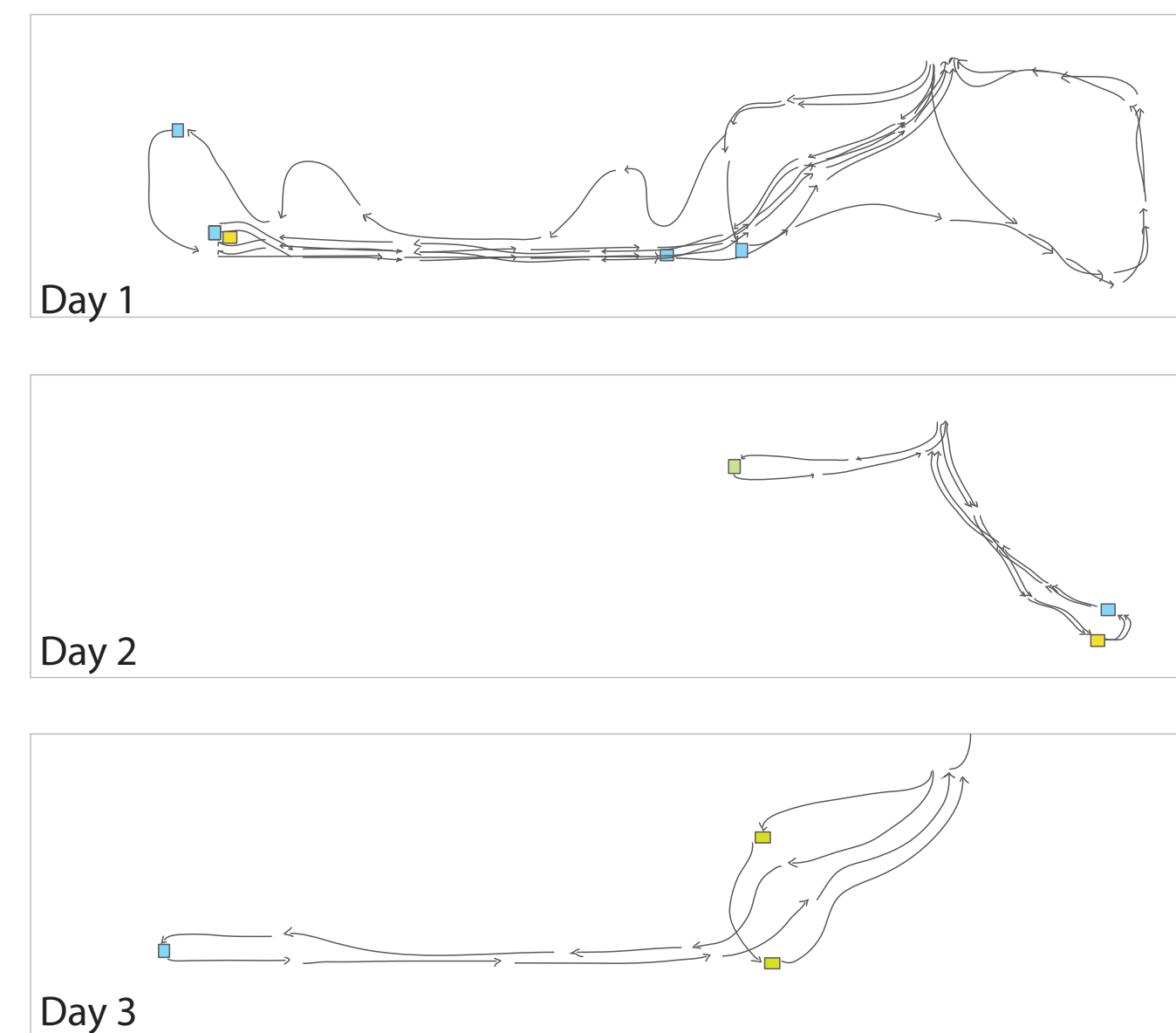


Duration



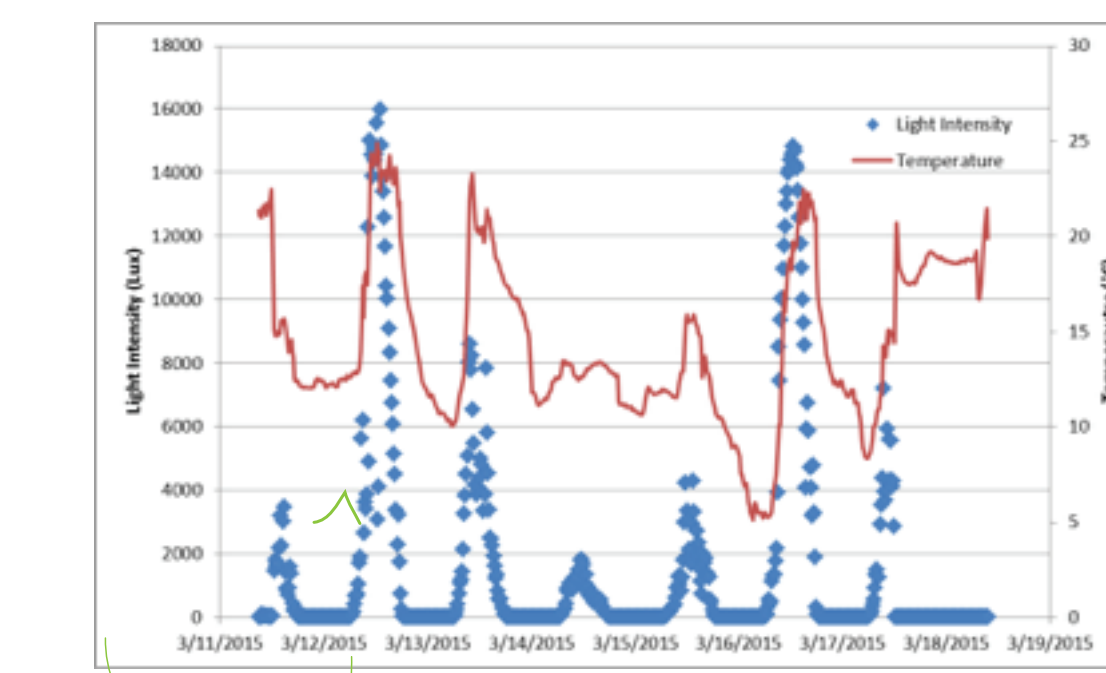
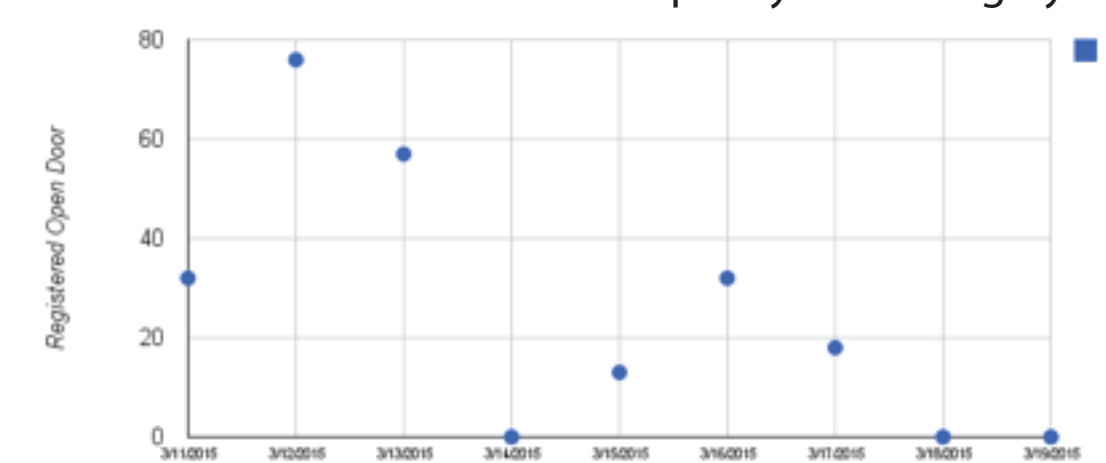
RESULTS

Three distinct groups of people used Randall Children's Hospital Terrace Garden. Of the total amount of users, 50% were visitors, 14% were patients, and 43% were providers. User groups identification was determined through dress and activity (fig. 5). The average length of stay at Randall Children's Hospital was eight (8) minutes. 9% of users stay less than five (5) minutes. 27% stayed 6-10 minutes, 27% stay 11-15 minutes, and 9% stay 15-20 minutes (fig. 6). During observation, eleven (11) of the thirteen (13) recognized activities were present: sit and relax (23%), sit and talk (4.5%), cell-phone (9%), lunch (9%), work meeting (4.5%), let children play (9%), walk around (18%), patient interaction (4.5%), structural interaction (4.5%), and play (9%). The order of the activity was visually recorded in fig. 7 from exertion to active to stationary. Behavior mapping was recorded to spatially track the circulation and movement of user groups during garden use. In the plan below, each user group is demarcated by color with blue as visitor, green as provider, and yellow as child/adolescent.

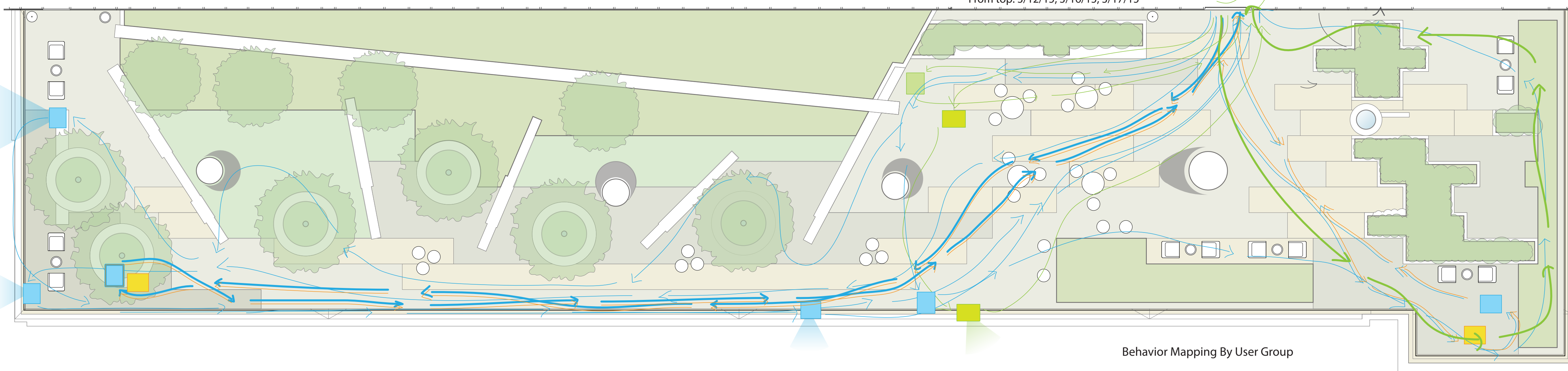


Behavior Mapping By Day
From top: 3/12/15, 3/16/15, 3/17/15

Occupancy Recording by Day



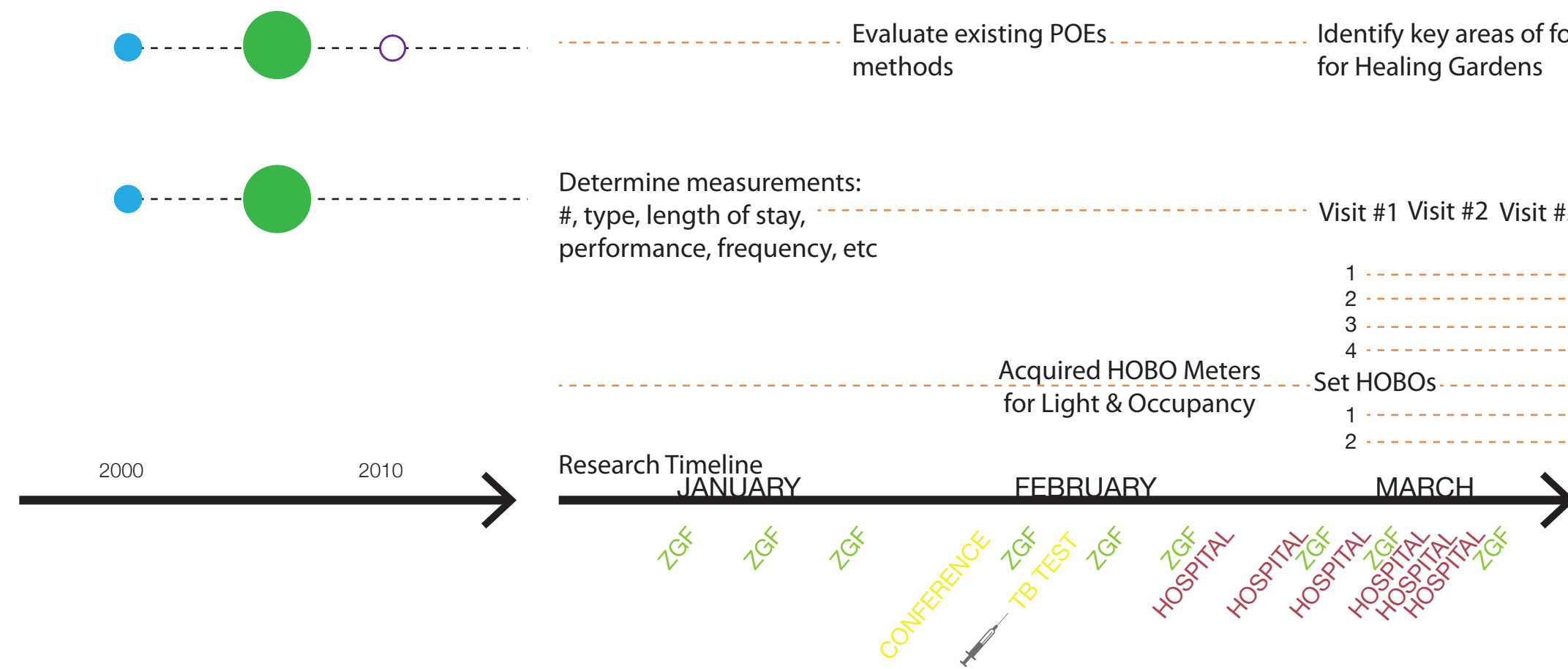
Temperature & Lux by Day



Behavior Mapping By User Group



Literary Research: Methodology

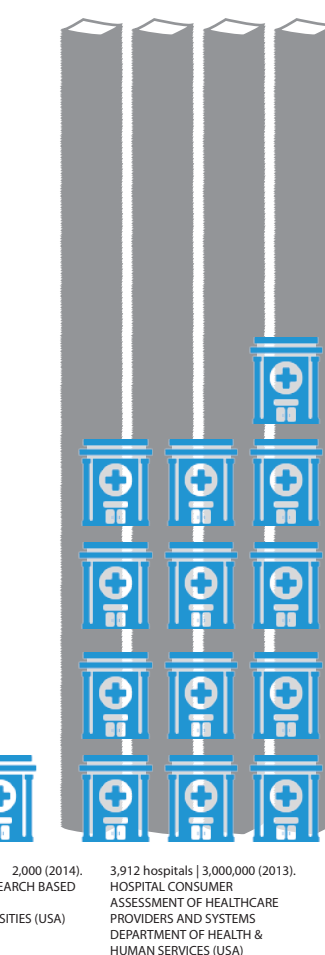


DISCUSSION

This research has successfully established an initial set of data for healing gardens at a local Portland, Oregon Children's Hospital. This data is useful for comparing user groups, duration, and activity between a local hospital and other regions of the United States where research has been done. Findings from this research begin to tell us how and to what extent a healing garden is being used, but more research is needed to answer this question. Discrepancies between this research and literary research suggest the role of healing gardens in hospitals is not yet known. Until it is, it is difficult and possibly dangerous to implement design guidelines for this design typology.

NEXT STEPS

The next step of this research would be to develop and distribute a survey. The data most recently collected would be used to inform the questions asked in the survey, but it would also be used as a comparative set of data once surveys are returned. The combination of these two methods would greatly enhance our understanding of Randall Children's Hospital healing garden.



Surveys are increasingly becoming a standard method for collecting data on the design/quality of the built environment. This graphic displays the frequency surveys are being distributed to understand the built environment.

