ABOUT | DESIGN INTENTIONS

The Children's Hospital of Richmond at Virginia Commonwealth University (VCU) is the largest and most advanced outpatient health facility dedicated to children in the region. Located at the gateway to the Medical College of Virginia campus, the 15-story ambulatory pavilion consolidated existing pediatric clinics into a vertical urban pavilion and includes a surgery level, three levels of pediatric clinics and a floor dedicated to faculty offices, research and medical student education.

Adjacent to Richmond’s most important civic and historic structures, the design establishes a signature identity that embodies VCU Health System’s objective of enhancing their brand image and status as a premier pediatric academic medical institution. With its prominently located roof terrace and themes of sky, water and forest, the design brings nature to the heart of this urban campus.
Children's Hospital of Richmond Pavilion
Richmond, Virginia

Inspired by water

Water has many intrinsic and symbolic characteristics that lend themselves to a supportive, healing environment. It can be abstracted and interpreted in pattern, color, texture, and form. Through creative surface manipulation, we can transform solidity into ephemeral, emulating the effects of liquid with reflections and undulations. A random pattern of repetitive elements can create a shimmering effect and fluid reflections; smooth, continuous, but vibrant and transparent, with depth and color; luminous.

The new Children's Hospital of Richmond Pavilion (CHoRP), will be an outpatient facility dedicated to providing comprehensive and compassionate healthcare for children, including primary and sub-specialty care, outpatient surgical and imaging services, and clinical research studies. It contains four levels of pediatric care clinics, including six specialty clinic pods, each with twelve exam rooms, treatment room, support spaces and nurse work core. The building is designed to optimize flexibility, efficiency and future horizontal and vertical expansion.

SITE PLAN

DESIGN STRATEGIES

Inspired by water

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DESIGN STRATEGY

Collaboration space

The CHoRP was designed with collaboration in mind, incorporating a range of planning and design elements that promote enhanced clinical care in an uplifting environment that supports patient, staff and visitor comfort. Its three levels of pediatric care services include seven specialty clinic modules, each with 12 exam rooms, a treatment room, support spaces and a nurse work core.

With an emphasis on physical, visual and abstract connections to nature, CHoRP has a calming, restorative effect on all who experience the building, reducing anxiety and stress, and in turn, promoting health and healing. The focus is on the patient and his or her family and the elimination of stresses associated with medical facilities in a busy urban setting.

“Having nearly all pediatric outpatient services under one roof makes such an impact on our patients and their families,” said Suzanne Britt, director of the Children’s Pavilion. “Kids can spend more time being kids and parents can have the convenience of multiple appointments in one building and miss fewer days of work.”
Children's Hospital of Richmond Pavilion
Richmond, Virginia

DESIGN STRATEGY
Integration to the context
Adjacent to the city’s most important and historic civic structures, the design establishes a bold, signature identity that embodies VCU’s objective of being the premier pediatric academic medical institution for the care of sick and injured children.

The Broad Street entry will be enlivened by a cafe and retail/gallery space. Bold colors and integrated artwork are used at key entries throughout the pavilion to welcome patients and family members.

The open and light filled vehicular drop-off is patient friendly and welcoming. Wood ceilings and brightly colored terra cotta tiles drawn your eye to the entry portal.

GROUND LEVEL

TRAVEL DISTANCE ANALYSIS

DEPARTMENTAL GROSS SQUARE FOOT TAKE-OFFS

<table>
<thead>
<tr>
<th>Department</th>
<th>Gross</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material Handling</td>
<td>1051 SF</td>
</tr>
<tr>
<td>Gallery/cafe</td>
<td>3191 SF</td>
</tr>
<tr>
<td>Retail</td>
<td>3731 SF</td>
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</tbody>
</table>

TRAVEL DISTANCE ANALYSIS

- Patient: Entrance to elevator 152 ft
- Family: Drop off to entrance 83 ft

Note: “Departmental Square footages take-off based on Analysis of Departmental Area in Contemporary Hospitals calculation methodologies & Design Factors Report, 2014

AIA Academy of Architecture for Health | Research Initiatives Committee
Case Study Format Developed By: AIA Academy of Architecture for Health | Research Initiatives Committee
CHILDREN'S HOSPITAL OF RICHMOND PAVILION | CASE STUDY ANALYSIS
Sky garden
Five stories above grade, the sky garden is an open air healing garden offering dramatic views of the city. The garden brings nature to the heart of the urban campus and will have a calming, restorative affect for patients, families and staff.

Patients will be greeted at the Sky Lobby with expansive views to the exterior. A concierge desk and electronic informational kiosks will facilitate registration and wayfinding. A cafe connecting to the Sky Garden will offer healthy drinks and snacks. Wood slat ceiling and patterned porcelain tile and lighting add visual interest and continue to reinforce patterns found in nature.

LEVEL 1:

Note: “Departmental Square footages take-off based on Analysis of Departmental Area in Contemporary Hospitals calculation methodologies & Design Factors Report, 2014

DEPARTMENTAL GROSS SQUARE FOOT TAKE-OFFS

<table>
<thead>
<tr>
<th>Gross</th>
<th>Infusion</th>
<th>Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td>9673 SF</td>
<td>9673 SF</td>
<td>1074 SF</td>
</tr>
</tbody>
</table>

TRAVEL DISTANCE ANALYSIS

- Patient: Clinic Elevator to Parking Elevator 96ft
- Clinic Elevator to HEM/ONC waiting 164ft
- Waiting to Infusion 110ft

- Family: Parking Elevator to Sky Lobby 57ft

- Staff: Office to Exam room 129sf-173sf

KEY SPACES:

- Exam Rooms (129sf)
- Office (129-216sf)
Children's Hospital of Richmond Pavilion
Richmond, Virginia

**LEVEL 2:**

**Atrium**
The atrium helps mark the 11th Street campus gateway and offers a dynamic and engaging environment for children and young adults, with a dramatic connecting stair and prismatic light sculpture. The atrium ceiling and feature wall of rich wood paneling and interactive lighting acts as metaphor for a grove of trees.

**Key**
- Surgery/Intervention
- Imaging
- Atrium
- Future expansion

**Design Strategy**

**Departmental Gross Square Foot Take-Offs**

<table>
<thead>
<tr>
<th>Department</th>
<th>Gross SF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surgery/Intervention</td>
<td>2564 SF</td>
</tr>
<tr>
<td>Imaging</td>
<td>1210 SF</td>
</tr>
<tr>
<td>Atrium</td>
<td>718 SF</td>
</tr>
</tbody>
</table>

**Travel Distance Analysis**

- Patient: Elevator to Waiting 28 ft
- Waiting to Pre-op 77 ft to 199 ft
- Pre-op/Post-op to OR 95 ft to 210 ft

**Key Spaces:**
- OR (626 sf)
- Pre-op/Post-op (137 sf)
- General Radiology (293 sf)

*Note: Departmental Square footages take-off based on Analysis of Departmental Area in Contemporary Hospitals calculation methodologies & Design Factors Report, 2014*
**Children's Hospital of Richmond Pavilion**
Richmond, Virginia

**Clinic design**
The central work core encourages interaction between nurses and physicians, resulting in a coordinated care team approach. Rather than embedding diagnostics into each specialty clinic, efficiency is gained through shared diagnostics on each clinical floor. Each 12-exam module is organized with perimeter exam rooms, creating a calmer patient experience by fully separating the offstage support zone from the onstage patient environment.

**LEVEL 4:**

**Clinic design**
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**Note:** “Departmental Square Footages take-off based on Analysis of Departmental Area in Contemporary Hospitals calculation methodologies & Design Factors Report, 2014”

**DEPARTMENTAL GROSS SQUARE FOOT TAKE-OFFS**

<table>
<thead>
<tr>
<th>Department</th>
<th>Gross Square Foot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinic</td>
<td>20645 SF</td>
</tr>
<tr>
<td>Public Waiting Area</td>
<td>13156 SF</td>
</tr>
<tr>
<td>Neurology/Dialysis</td>
<td>5159 SF</td>
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</table>

**TRAVEL DISTANCE ANALYSIS**

- **Public:** Elevator to Clinic Waiting: 141-234 ft
- **Clinic Waiting to Exam Room:** 61 ft-130 ft
- **Family:** Elevator to waiting: 23 ft-95 ft
- **Staff:** Elevator to staff work core: 113 ft-319 ft

**KEY SPACES:**
- Exam Room (116 sf)
- Workcore (1303 sf)
Children’s Hospital of Richmond Pavilion
Richmond, Virginia

Design Strategy

Interior design

The building’s contemporary design includes beautiful glass enclosures. “There’s a pleasant quirkiness to it,” said design award judge Jennifer Schlimgen, vice president at design firm Kahler Slater, noting that the building isn’t completely rectangular and the exterior is integrated with the surrounding environment.

The design allows for natural light to flood into the building, and patients and their families have various places to get even more sunlight and fresh air. A sky lobby leads out to a rooftop terrace and garden, bringing together themes of sky, water and forest. It also offers views of the James River.

Project Summary:

▶ A strong concept and sophisticated approach to a difficult program are evidence of the focus this team brought to this solution. The design respects the difficulties of the site and the opportunities of designing for a children’s health facility.

▶ The clinic level medical planning is very well done – reflecting efficient clinician workflow without compromising day lighting to the staff and public areas. The building massing responds exceptionally well to the functional requirements and are executed with appropriately differing materials. This is an insightful solution to a compressed urban site.

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