Space Planning: A Step by Step Guide

Philosophy of Design
“Form Follows Function”

Louis Sullivan, Architect
1856-1924
Father of the Modern Movement
Frank Lloyd Wright’s mentor

Financial Disclosure
I am one of two owners of Practice Flow Solutions.
We provide advisory and planning services for fee.

Objective of Course
Describe the Step by step process of designing a practice within a suite space.

Philosophy of Design
“If a building/space has a specific function the design should be guided by and support that function.”

Tim Griffin, AIA
Practice Flow Solutions
www.PracticeFlowSolutions.com

ASOA Course
Tuesday, April 29, 2014
10:30 am – 11:30 am
Room 104A
Space Planning: A Step by Step Guide

Philosophy of Design
“Form Follows Function”

Medical Practice Planning
All decisions of the design should center around improving the practice flow.

Identify Need
Successful Practice Planning

- Growth
- Doctor’s Potential
- Schedule
- Space Needs Assessment
- Parking

Philosophy of Design
Conflicting Constraints

- Site
- Sun
- Access
- Zoning
- Needs of the Practice

Identify Need
Growth

Think short term and long term.

Nothing is as permanent as a temporary solution.

Proper Steps
Successful Practice Planning

- Identify Need
- Find Space
- Design

Identify Need
Doctor’s Potential

Compare current output with the actual potential of each provider.

Observations
Identify Need
Doctor’s Potential

Schedule
Balance current schedules and add any growth of providers.

Identify Need
Doctor’s Potential

Schedule

Identify Need
Schedule

Identify Need
Schedule

Identify Need
Schedule

Identify Need
Schedule

PracticeWatch Summary

Percentage of Total Time
69.98% 11.95% 18.07% 100.00%

PracticeWatch Summary

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69.98% 11.95% 18.07% 100.00%

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Percentage of Total Time
69.98% 11.95% 18.07% 100.00%

Identify Need
Schedule

Identify Need
Schedule

Identify Need
Schedule

Identify Need
Schedule

Identify Need
Schedule
### Identify Need

#### Space Needs Assessment

Must know what kind, how much and how many of all spaces before design starts.

”Laundry List of Spaces”

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#### Identify Need

<table>
<thead>
<tr>
<th>Basis of Spatial Allocations</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Site Data</strong></td>
<td></td>
</tr>
<tr>
<td>2 MDs/ODs per patient (2 MD / 0.5 OD)</td>
<td></td>
</tr>
<tr>
<td>2 IF of MDs seeing patients at one time (pods)</td>
<td></td>
</tr>
<tr>
<td>4 exam lanes per MD pod</td>
<td></td>
</tr>
<tr>
<td>1 wait customer per MD pod</td>
<td></td>
</tr>
<tr>
<td>1 doctor work station per pod</td>
<td></td>
</tr>
<tr>
<td>5 patients seen every hour per MD pod</td>
<td></td>
</tr>
<tr>
<td>2 busy and unwary walk patients</td>
<td></td>
</tr>
</tbody>
</table>

#### Identify Need

<table>
<thead>
<tr>
<th>From Office Timings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>10 total number of patients seen by all providers every hour</td>
<td></td>
</tr>
<tr>
<td>110 hours per day for 3 MDs/ODs at the practice (2 MD 1 OD)</td>
<td></td>
</tr>
<tr>
<td>1 doctor work station per pod</td>
<td></td>
</tr>
<tr>
<td>1 tech station per MD pod</td>
<td></td>
</tr>
<tr>
<td>2 # of MDs seeing patients at once (pods)</td>
<td></td>
</tr>
<tr>
<td>120-150 patients seen every hour, adding family that accompany each patient</td>
<td></td>
</tr>
<tr>
<td>180 # of hours per day for 3 MDs/ODs at the practice (2 MD 1 OD)</td>
<td></td>
</tr>
<tr>
<td>1 computer room</td>
<td></td>
</tr>
<tr>
<td>1 coat closet</td>
<td></td>
</tr>
</tbody>
</table>

---

#### Identify Need

<table>
<thead>
<tr>
<th>Waiting</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5 waiting</td>
<td></td>
</tr>
<tr>
<td>10 total number of patients seen by all providers every hour</td>
<td></td>
</tr>
<tr>
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</tr>
<tr>
<td>1 coat closet</td>
<td></td>
</tr>
</tbody>
</table>

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#### Identify Need

<table>
<thead>
<tr>
<th>Primary</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1 tech station per MD pod</td>
<td></td>
</tr>
<tr>
<td>1 doctor work station</td>
<td></td>
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</tr>
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<td>1 coat closet</td>
<td></td>
</tr>
</tbody>
</table>
Identify Need

<table>
<thead>
<tr>
<th>BUILDING SERVICES</th>
<th>SF</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone/electric</td>
<td>48</td>
<td></td>
</tr>
<tr>
<td>Janitor/water heater closet</td>
<td>35</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>83</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Hallway Factor</strong></td>
<td><strong>20%</strong></td>
<td><strong>17</strong></td>
</tr>
<tr>
<td><strong>BUILDING SERVICES</strong></td>
<td><strong>Total</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**TOTAL USEABLE NET AREA**: 4,897

Find Space

**Location**
- Right side of town for patients
- Zip code study
- Development Direction
- Realtor

Proper Step

**Successful Practice Planning**
- Identify Need
- Find Space
- Design

Find Space

**Geometry**
- Beware of “snakes and snails”
- Fat Rectangle
- Secondary Circulation
- Structural Layout

Find Space

**Work with a realtor**
- Location
- Geometry
- Parking
- Due Diligence

Find Space

**Geometry – “Snake”**
**Find Space**

**Geometry – “Snail”**

- Core

**Find Space**

**Due Diligence**

- Proper Zoning
- Building Integrity
- Building Systems
- Fair Rent
- Landlord Reputation
- LOI
- Attorneys and Realtors

**Find Space**

**Geometry – Good**

**Find Space**

**Parking**

- Your Needs
- Neighbors
- Patients who can’t park will be late or not come at all

**Proper Step**

**Successful Practice Planning**

- Identify Need
- Find Space
- Design

**Design**

**Practice Planning Steps**

- Identify Entrances
- “Pod” configurations
- Patient Flow
- Staff and Doctor Areas

---

**Tim Griffin, AIA**

**Practice Flow Solutions**

www.PracticeFlowSolutions.com
Design

Identify Entrances

Exam Pod Layout

“Straight Line”

Too much walking

+/- 40'

Design

Identify Entrances

Exam Pod Layout

“Straight Line”

Too much walking

Deal with other MD patients

Good for education

+/- 40'

Exam Pod Layout

“Angled”

Too much walking

Shorter to MD

More Hall

+/- 25'

+/- 20'

Practice Planning Steps

• Identify Entrances
• “Pod” configurations
• Patient Flow
• Staff and Doctor Areas

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**Design**

Exam Pod Layout

*Angled*

<table>
<thead>
<tr>
<th>L</th>
<th>L</th>
<th>MD</th>
</tr>
</thead>
</table>

Too much walking
Shorter to MD
Semi-private hall
Good for education

---

**Design**

Exam Pod Layout

*Nested*

| L | L | MD |

Hall cut in half

---

**Design**

Exam Pod Layout

*Nested*

| L | L | MD |

Hall cut in half
Private hall
Connection at MD

---

**Design**

Exam Pod Layout

*Nested*

| L | L | MD |

Hall cut in half
Private hall
Connection at MD

---

**Practice Planning Steps**

- Identify Entrances
- "Pod" configurations
- **Patient Flow**
- Staff and Doctor Areas

---

**Practice Planning Steps**

- Identify Entrances
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**Practice Planning Steps**

- Identify Entrances
- "Pod" configurations
- **Patient Flow**
- Staff and Doctor Areas

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**Design**

**Patient Flow**

---

**Design**

**Patient Flow**

---

**Design**

**Patient Flow**

---

**Design**

**Patient Flow**

---
Design Doctor and Staff

Design

Practice Planning Drawings

- Practice Flow Diagram
- Initial Practice Plan (Schematic Design)
- Final Practice Plans (Design Development)

Design

Practice Flow Diagram

Sketch with limited detail that communicates the basic layout of the major spaces.

Design

Initial Practice Plan

Called Schematic Design in architectural world. Begins to show the detail of all rooms, built in cabinetry, furniture, and equipment.
Design

Final Practice Plans


Case Studies

Local architect

Practice Flow Diagram

Initial Practice Plan

Side by Side

Case Studies 1

Local Designer

Practice Flow Diagram
Case Studies 1
Initial Practice Plan

Case Studies 1
Side by Side

Practice Design
Patient Path Queues
Prominent Check-in
Check-out on way to pods
Tech Station
Finish changes
Lighting

Case Studies 2
Local Designer
Case Studies 2
Practice Flow Diagram

Case Studies 3
Local Designer

Case Studies 2
Initial Practice Plan

Case Studies 3
Initial Practice Plan

Case Studies 2
Side by Side

Case Studies 4
Local Designer

Local Designer "Fit Plan"
Case Studies 4
Initial Practice Plan

Your Team Members
- Architect of Record
  - Engineers
  - Bid/Permit Drawings
  - Contract Administration
  - Punch
- Interior Designer
  - Finishes
  - Art
  - Furniture
  - Contractor

Case Studies 4
Side by Side

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Your Team Members
- Practice Planner
  - Identify Practice Needs
  - Space Needs Assessment
- Realtor
  - Find right space
  - Negotiate
- Practice Planner
  - Initial Practice Plans
  - Final Practice Plans

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THANK YOU!
Tim Griffin, AIA
giffin@PracticeFlowSolutions.com