

# **Mobile Dentistry: Medicaid Friend or Foe?**

*Medicaid/SCHIP*

*Dental Program Representatives Caucus*

**Pittsburgh, PA**

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## **Who are the Medicaid target population?**

- **Head Start kids**
- **School-age kids in low-income neighborhoods**
- **Elderly**
- **Folks with disabilities**

## **Who are the Mobile dentistry target population?**

- **Head Start kids**
- **School-age kids in low-income neighborhoods**
- **Elderly**
- **Folks with disabilities**

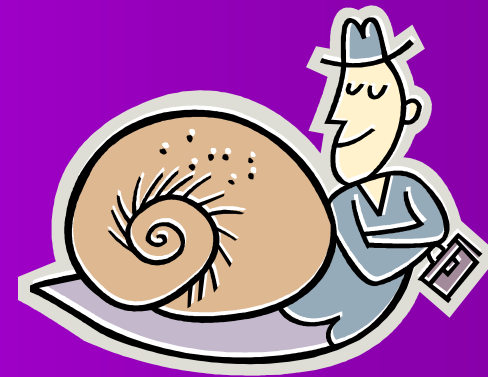
## Reputation of Mobile Dentistry

- **Scoundrels**
- **Fraud**
- **Exploitation**



## Reputation of Medicaid

- **Process is slow**
- **Pay is low**
- **High rates of no-shows**

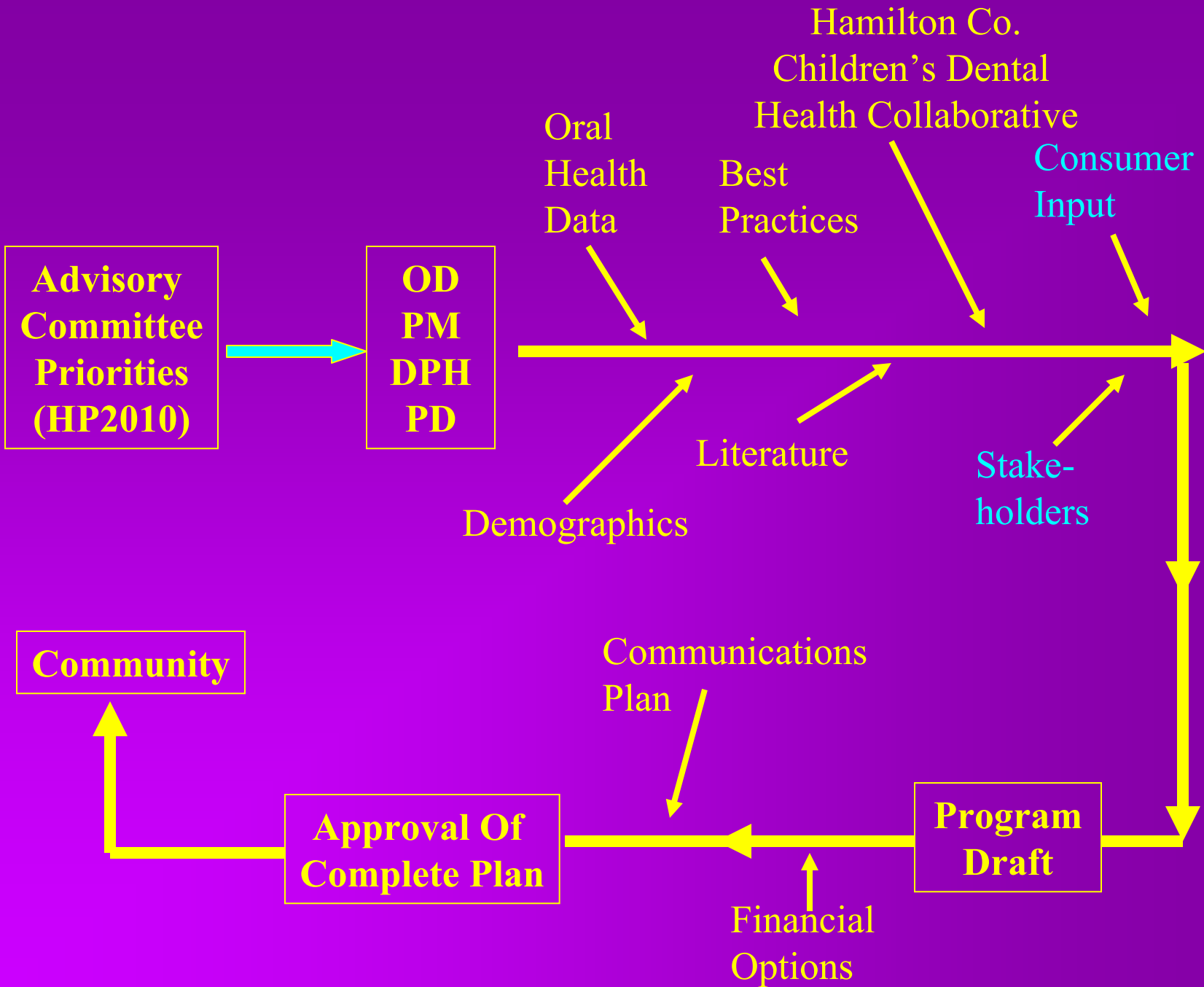




**Crooks**

**Bureaucrats**

**A Match Made in Heaven!**



Bright Smiles

Healthy Smiles



Smiles Are Forever







# School-Based

## Pros:

- Kids are there
- Takes away the no-show problem
- Eliminates transportation barriers
- Minimizes problem of working parent(s)



## Cons:

- Does it create a desired behavior or dependency?
- Hours of operation
- Limitations for adults

# Health Center / Fixed Site

## Pros

- **Eliminates hauling, setting up, breakdown**
- **Fewer maintenance issues**
- **Predictability**
- **Recruitment and retention**
- **Space / environment**
- **Associated with other services**

## Cons

- **Access**
  - **Transportation**
  - **hours conflict with workday**

# **Who Else Wants a Safety Net?**

**You?**

**Target Population?**

**Other community support?**

# Portable Equipment

## Pros

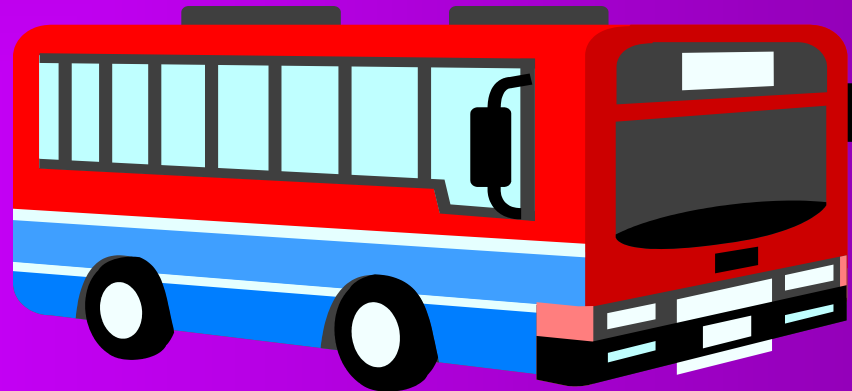
- **Less costly**
- **Maximizes mobility**
- **Take it wherever you want**
- **Light weight**

## Cons

- **Set-up and break-down (hassle and time)**
- **Less controlled environment**
- **Uncomfortable**
- **Staff retention**

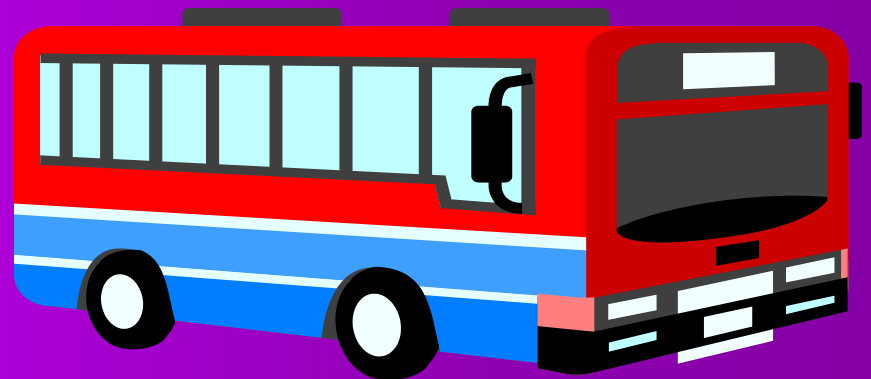
# Vans (Pros)

- **Mobility**
- **Fixed Environment**
- **Eliminates No-Shows**
- **Minimizes Transportation Barriers**
- **Comfort almost of fixed site**



# Vans (Cons)

- **Expensive start-up (not really!)**
- **Maintenance (\$)**
- **Storage (\$)**
- **Limited space inside**
- **Parking vehicle**
- **Liability (moving kids)**
- **Driving it**
- **Potential expansion**



# Clinic Facilities



# Who Do We Ask For Help?

## Multiple Choice Question

- **Dental Supplier?**
- **Local Dentist?**
- **Staff Dentist?**
- **State/Local Health Department?**
- **Someone experienced in setting up similar clinics?**



Association of  
State &  
Territorial  
Dental  
Directors



Ohio  
Department of  
Health



Indian  
Health  
Service



Website  
hosted by  
National  
Maternal & Child  
Oral Health  
Resource Center



Problems using this Website should be directed to the [Webmaster](#).

## Section II. Planning

[a. What kind of planning is necessary?](#)

[b. How will the clinic's mission and goals affect access and financial sustainability?](#)

[c. How do we assess the need for a clinic \(needs assessment\)?](#)

[d. How do we decide if a clinic is feasible?](#)

[e. Whom do we want to serve?](#)

[f. What level of service do we want to provide?](#)

[g. What role can volunteers play?](#)

[h. Should we apply for a federal Dental Health Professional Shortage Area \(HPSA\) designation?](#)

[i. Is a fixed dental clinic facility what we need?](#)

## Section II. Planning

### i. Is a fixed dental clinic facility what we need?

There are different modes for the direct delivery of dental care, each with its own advantages and disadvantages:

- [fixed clinic facility](#)
- [mobile](#)
  - self-contained motorized van
  - trailer (non-motorized)
- [portable equipment](#)

Answers to previous questions about target population and level of service will influence the decision about facility choice. For example, if you want to provide basic dental services to children located in schools that are geographically dispersed, then you might consider a mobile van or trailer. If you wish to provide a wide range of dental services to the general population of a community, you would most likely choose a fixed facility.

The table on the next page, developed as part of another project of the Association of State and Territorial Dental Directors, compares the dental delivery modes. The types are not mutually exclusive, however. As an example, some fixed clinics use portable equipment to provide services in schools and a mobile van to travel to isolated communities.



# Medicaid's Role?

- **Credentialing**
  - standards
- **Monitoring**
  - standards
  - profiles

# What Rooms Do I Need?

**Reception area**

**Business area**

**Chart storage**

**Panoramic x-ray**

**X-ray processing**

**Lab**

**Sterilization**

**Utility room**

**Supply storage**

**Doctor's office**

**Bathrooms (staff  
vs. patient)**

**Break room**

**Treatment rooms**

# **New Construction Costs**

**\$150 per square foot**

**3-Chair Clinic**

**1,200 square feet**

**@ \$150/sq. ft. = \$180,000**



# Renovation Construction Costs

**\$75 per square foot**

**3-Chair Clinic**

**1,200 square feet**

**@ \$75/sq. ft. = \$90,000**

# Roles in Office Design

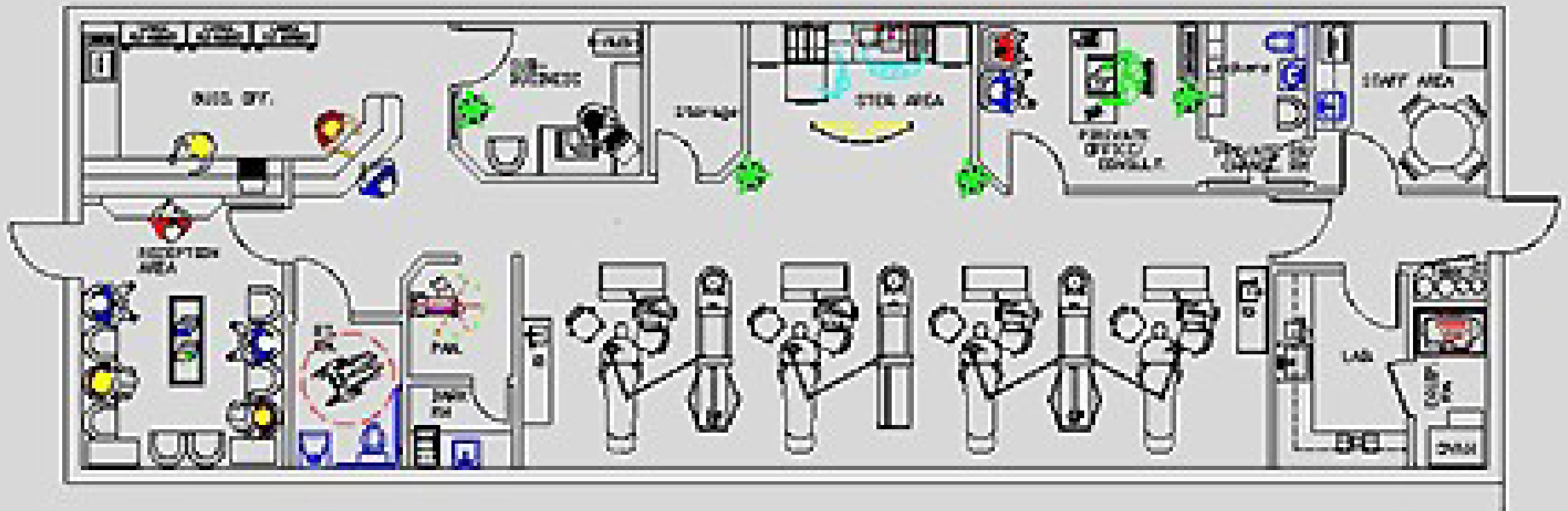
- **Dental Consultant:** Provides dental expertise regarding space utilization for a non-profit facility
- **Dental Supplier:** Provides preliminary drawings; knows patient and staff flow; can provide technical equipment specifications and requirements
- **Architect/Engineer:** Provides working drawings; knows building codes; HVAC requirements; construction oversight; makes things pretty
- **Contractor:** Provides construction expertise and management



# **How Many Dental Chairs?**

- **1 chair – almost never!**
- **2 chairs – nearly never**
- **3 chairs – minimum for one dentist and one hygienist**
- **4 chairs – very good for one dentist and one hygienist**
- **5 chairs – minimum for two dentists and one hygienist**
- **6 chairs - ?? for two dentists and one hygienist**
- **7-8 chairs – ideal for two dentists and one hygienist**

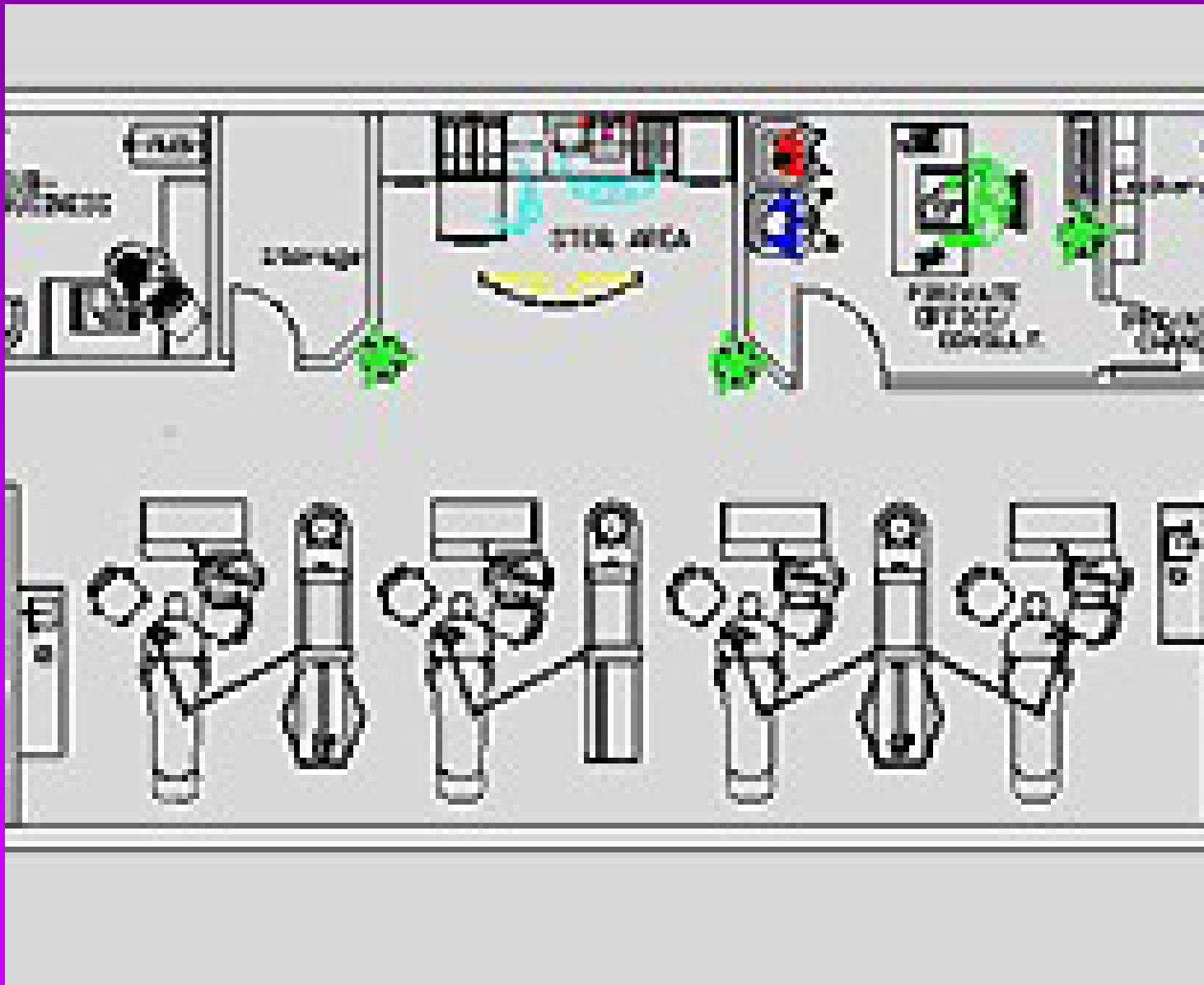
# 4-Chair Operator (1,830 sq ft)



# Principles for Dental Office Design

- Adequate spaces
- Flow pattern for patients and staff
- Every treatment room is the same
- Everything needed is within arm's length of dentist and assistant to minimize unnecessary steps and awkward movements

# Back to Principles



# Equipment

# Treatment Rooms – Per Room

	<u>List</u>	<u>Ext.</u>
Chair (1)	\$7,600 ea.	7600
Dental Unit (1)	\$4,000 ea.	4000
DA Instrumentation (1)	\$1,560 ea.	1560
Stools (2)	\$750 ea.	1500
Lights (1)	\$3,300 ea.	3300
X-Ray (.5)	\$4,750 ea	2375
HS Handpieces (2)	\$1,000 ea.	2000
LS Handpieces (1 + attach)	\$2,000 ea.	2000
Curing Lights	\$1,500 ea.	1500
Cabinets – as much as		18000
<b>TOTAL LIST</b>	<b>\$32,876 (with disc)</b>	

# Support

<b>Pan (1)</b>	<b>\$12-15,000</b>
<b>X-Ray Processor (1)</b>	<b>\$6,000</b>
<b>Vacuum &amp; Compressor (1 ea)</b>	<b>\$5-10,000</b>
<b>Sterilization</b>	
<b>-Autoclave (1 or 2)</b>	<b>\$5-6,000</b>
<b>-Ultrasonic</b>	<b>600</b>
<b>HP Lubricator</b>	<b>\$1,500-2,000</b>
<b>Lab</b>	
<b>- Model trimmer</b>	<b>500</b>
<b>- Lathe</b>	<b>200</b>
<b>TOTAL:</b>	<b>\$40,300</b>

**divided by # of tx rooms**



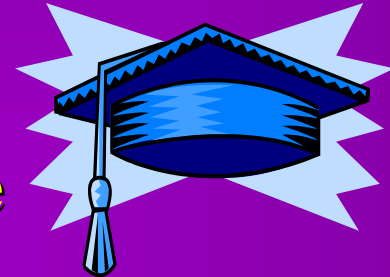


# Why Do Dentists Work in Health Centers?

**Social Conscience**



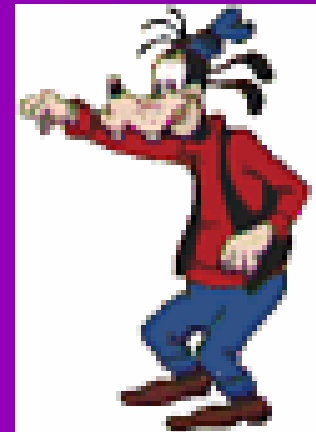
**Experience**



**Fear of Practice**



**Poor Practitioner**



A rose may be a rose,  
but a dentist is not a dentist

# Benchmarks for Productivity

- **Gross should exceed costs**
- **Encounters 2,300 - 3,000/DDS**
- **RVU rate: 85%**
- **\_\_% of treatment plans should be completed**



# Benchmarks for Viability / Sustainability

- **Revenue from all sources must meet or exceed costs**

# Setting Fees

- **ADA Fee Survey (JADA)**
- **Dental Economics**
- **National Dental Fee Survey**

**Wasserman Medical Publishers**

**PH: (800) 669-3337**

**[www.ndas.com](http://www.ndas.com)**

**Hit the road, Jack!**



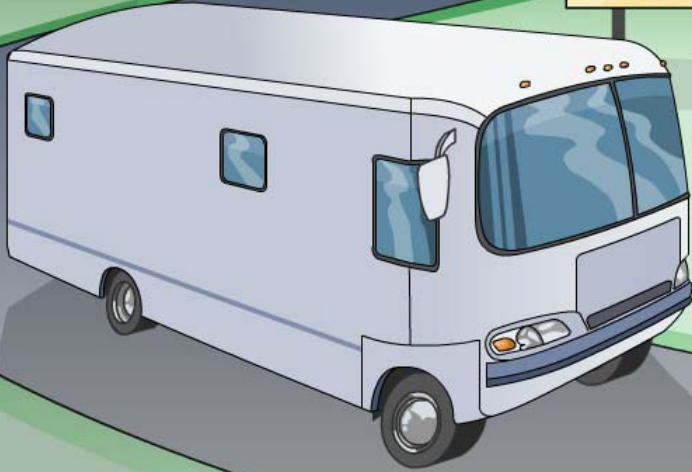
1. Introduction and Planning

2. Mobile Dental Systems

3. Portable Equipment

4. Mobile-Portable Hybrid

5. Measuring Effectiveness & Outcomes



**Anything worth doing  
is worth doing right!!**

# Word on the Street About Mobile

## Nay Sayers:

- **Waterlines freeze**
- **Expensive start-up**
- **Expensive to maintain**
- **High operating cost**
- **Cramped and claustrophobic**
- **Insufficient storage**
- **Inefficient operation**
- **Not a dental home**
- **Creates dependency**



# Word on the Street About Mobile

## Pollyanna's:

Oh, it's just the answer to all my dental  
dreams!!!





# Who's using them?

- **Entrepreneurial dentists**
- **Non-profits**
- **Governments**
- **Hospitals**

# Where are they used?

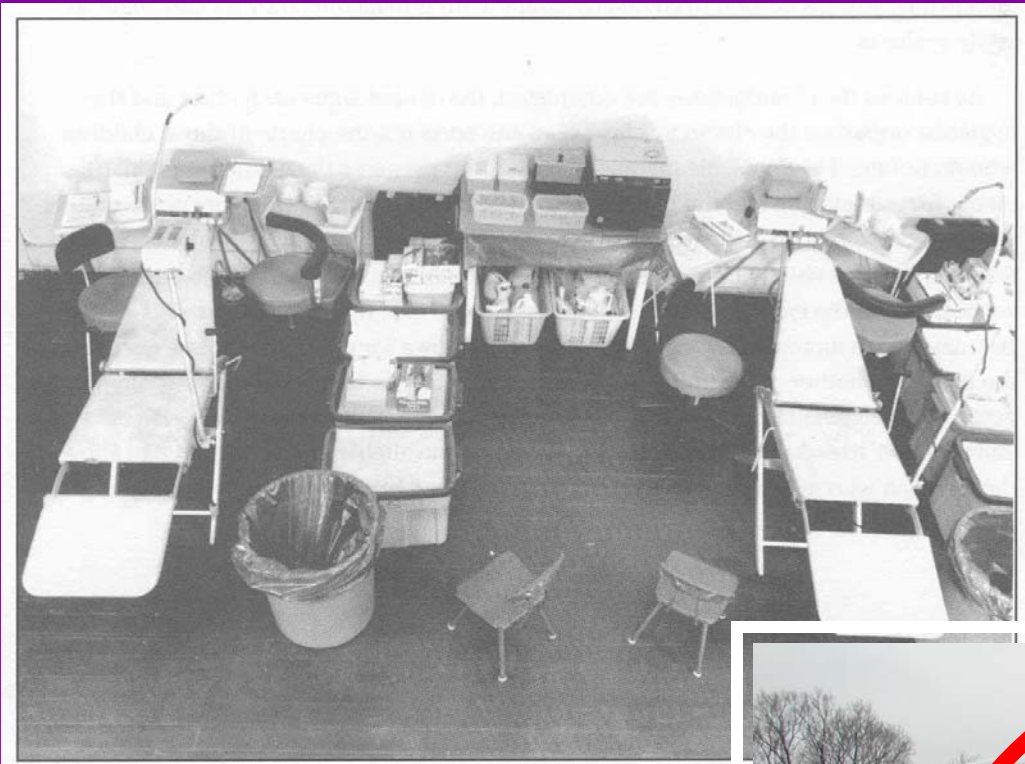


- **Nursing homes/assisted living facilities**
- **Head Start Programs**
- **Schools**
- **Day Care Programs**
- **Group homes**
- **Migrant farm workers**
- **Homeless shelters**



# **What are they used for?**

- **Education**
- **Screenings**
- **Sealants**
- **Treatment**
- **All of the above**



**Sealants**

**Screenings**



# Advantages

- **Can serve multiple populations in broad geographic areas**
- **Few limitations on locations**
- **On-site lab and x-ray possible**
- **Fixed environment**
- **High visibility**
  - **Potential funders**
  - **Potential users**

# Challenges

- **Initial costs/operating costs may be higher**
- **May not be perceived as community-based**
- **Misperceptions regarding proper usage**
  - Health Fairs, screenings, etc.
- **Recruiting and retaining providers**
- **Continuity of care issues**
- **Adversely affected by weather conditions**

# More Challenges

- **Security/storage**
- **Maintenance**
- **Maneuverability**
- **ADA compliance**

# **Why did I begin to think mobile?**

- **More than 40% of 8-year-olds in our sealant program were in need of treatment**
- **One year after diagnosis, 78% received no care**
- **Case management model was only moderately successful**
- **Head Start programs, school nurses, and others were becoming frustrated**



[Chapter 1 -  
Introduction/Planning](#)

[Chapter 2 - Mobile Dental Vans](#)

I. [Getting Started](#)

- a. [What are the options for buying vehicles?](#)
- b. [Do regulations for vehicles differ by state and locale?](#)
- c. [Who can help us research our options for mobile vehicles?](#)
- d. [What is the best way to shop for a mobile vendor?](#)

II. [Van Structural Considerations](#)

III. [Vehicle Design](#)

IV. [Building and Delivering the Vehicle](#)

[Chapter 3 - Portable Equipment](#)

[Chapter 4 - Mobile-Portable Hybrid](#)

[Chapter 5 - Measuring Effectiveness and Outcomes](#)

## a. What are the options for buying vehicles?

1. Self-contained motorized vans
  - a. Retrofitted RV or a used dental van
  - b. New vehicle on an RV chassis
  - c. Step-up van (like an airport shuttle)-can buy as a shell and then make into dental van
  - d. Commercial duty coach that is designed, engineered and built for dental services
2. Trailer that is designed as a dental clinic but is not self-propelled and needs to be hauled or towed by a truck to sites.



# Qualities of a Good Mobile Vehicle:

## What are the Basics

- **Chassis**
  - **Suspension (spring vs. air-ride)**
  - **Engine / transmission**
  - **GVWR / axle**
- **Construction**
  - **Tubular steel 16” on center**
  - **Welded joints**

# Chassis



# **Air-ride Suspension**



**Minimizes excessive road shock, lowers maintenance costs, and prolongs life of dental equipment and vehicle.**



# Sturdy Construction



# Beware of...

- **Retrofitted RV's**
- **Light usage vehicles (mini buses, step vans, etc.)**
- **Underpowered vehicles**
- **Accepting somebody's used vehicle because it's cheap or donated**

# Beware of...

**Sales pitch:**

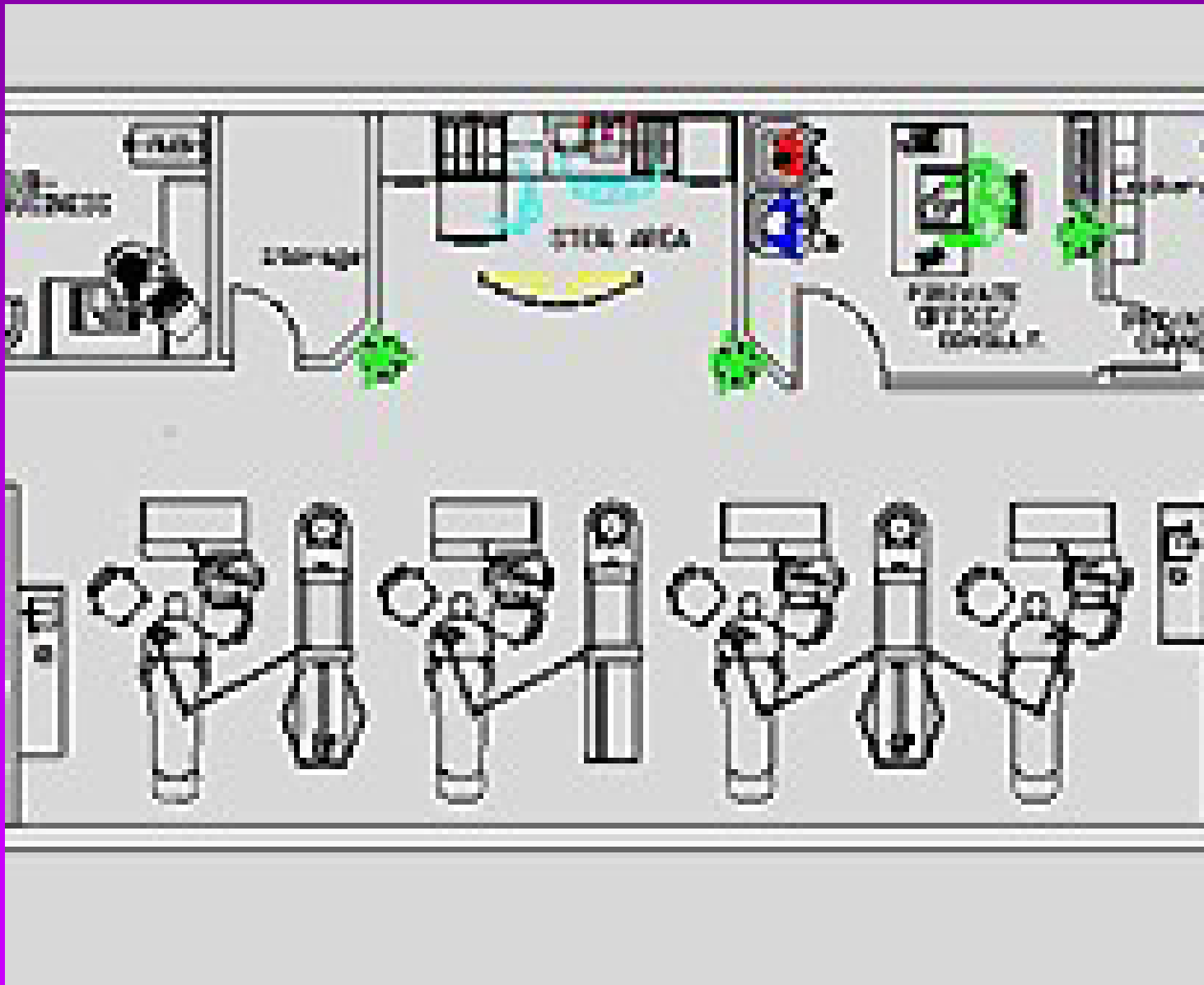
**“You will need as little as 1/3 of the average \$250,000 investment required to build or buy a standing practice. Not only will your initial investment be comparably smaller, but our clients usually find that their monthly overhead costs are lower.....”**

# Considerations for Floor Plan

- Remember the principles of office design
- Rear engine vs. front engine
- 1-chair vs. 2-chair vs. 3-chair
- Panoramic X-ray ?
- Patient/staff flow
- Do you want a bathroom?
- Wheelchair lift?



# Back to Principles



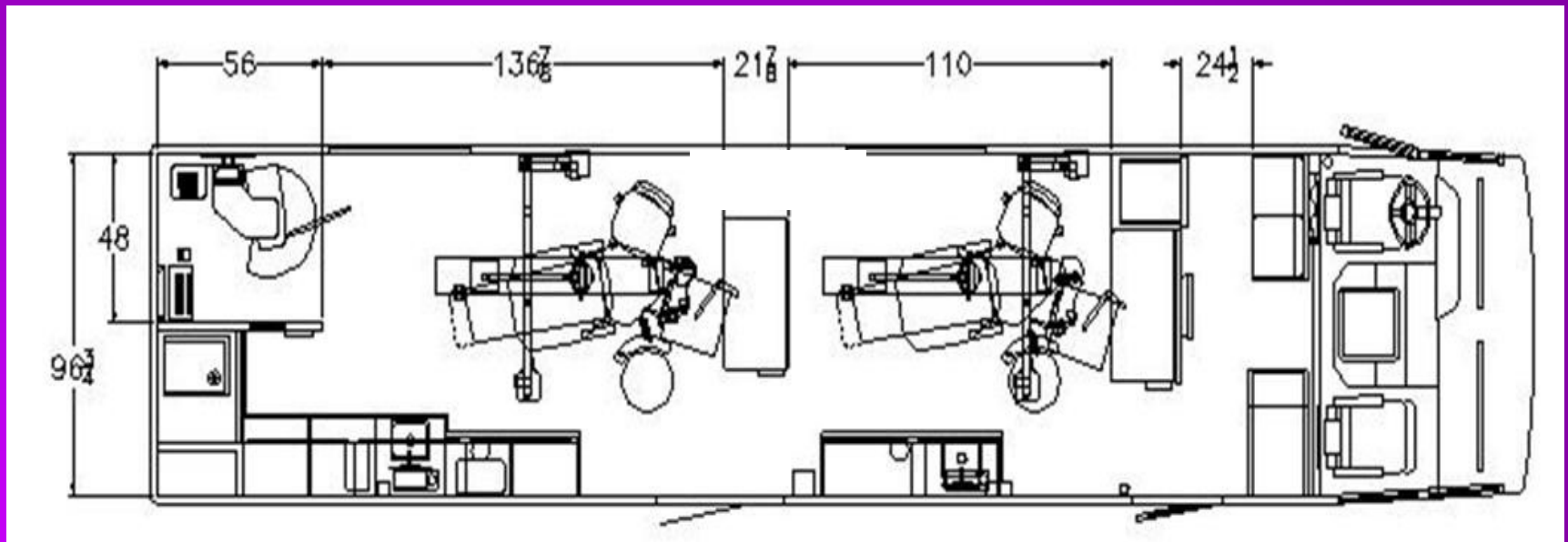
**What are the principles?**

# Principles for Dental Office Design

- Adequate spaces
- Flow pattern for patients and staff
- Every treatment room is the same
- Everything needed is within arm's length of dentist and assistant to minimize unnecessary steps and awkward movements

# Adequate Size

**Don't pick the size you want and then try to make the program fit your vehicle – remember the principles of office design!**









# Treatment Rooms



**Fixed site**

**Mobile vehicle**







# Panoramic X-Ray



**Fixed site**

**Mobile vehicle**



# Chart Storage



**Fixed site**

**Mobile vehicle**



# Reception Desk

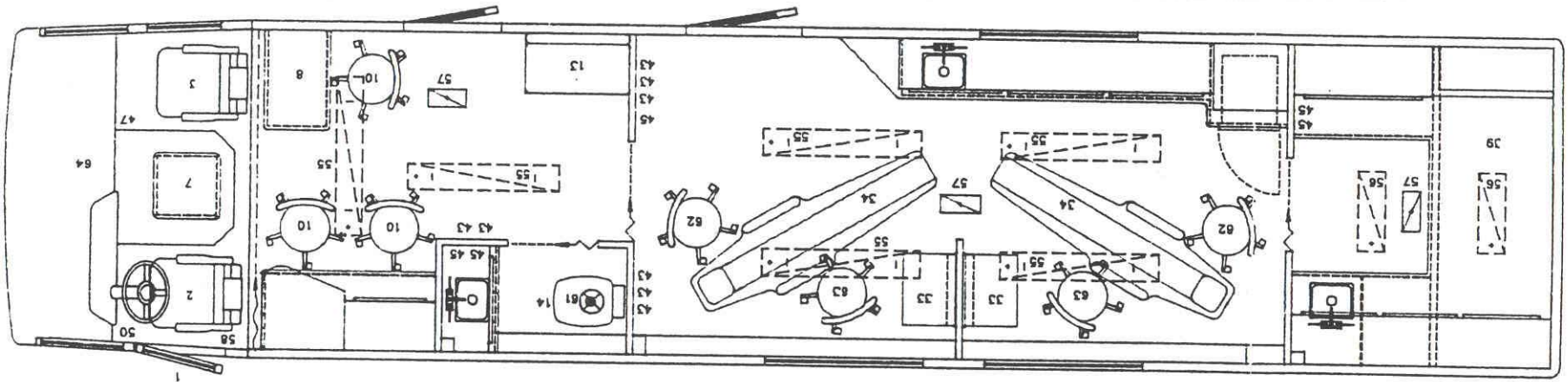


**Fixed site**

**Mobile vehicle**



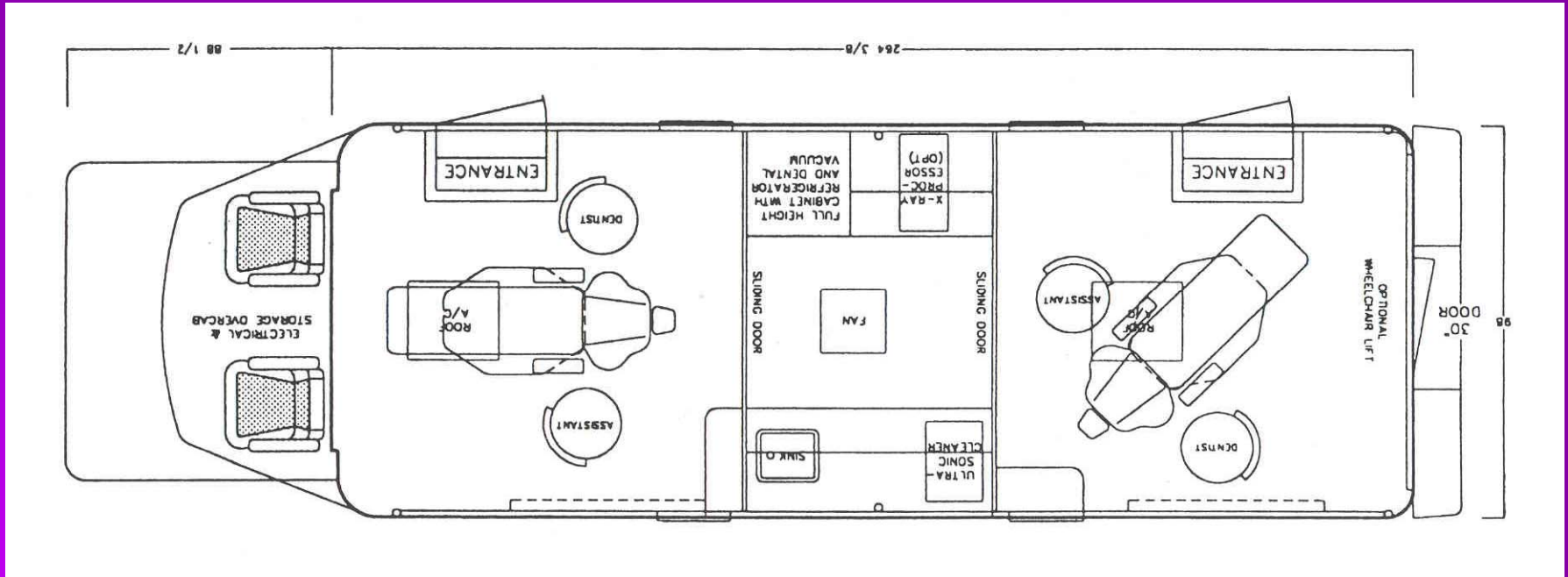
# Poor Floor Plan



- **Mirror image treatment rooms**
- **No work surface for the assistant**
- **Insufficient space for one person in each tx area**
- **Wasted space up front**



# Poor Floor Plan



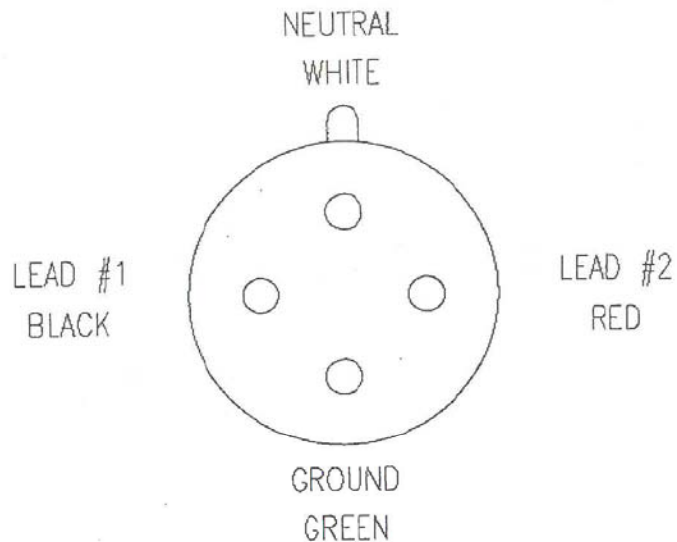
- Nothing is in the same relative place in the two rooms
- Neither instruments nor materials convenient to assistant
- No work surface for dental assistant
- No reception
- Poor visibility between rooms



# Wheelchair Lift



# Shore Power vs. Generator



SHOREPOWER PLUG  
SUPPLIED WITH VEHICLE  
#4100P12

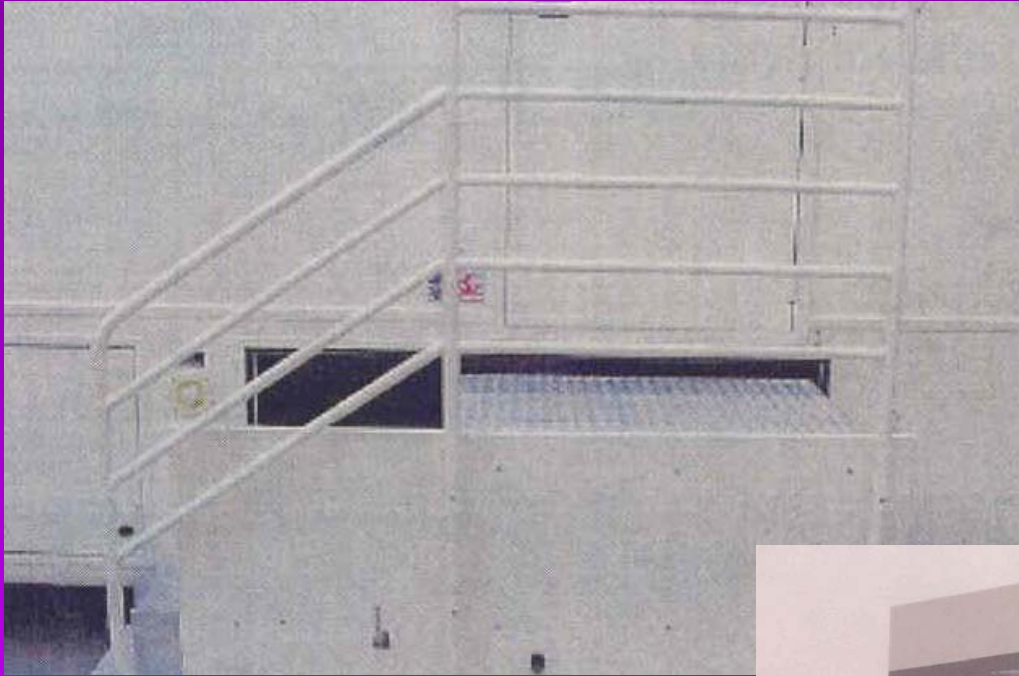
100A  
125/250 VOLTS, AC  
3 POLE / 4 WIRE

A	B	C	D	E





# Steps



# Air Conditioning



# **To computerize or not to computerize...**

- **Dental software and electronic charts almost eliminate the issue of record storage**
- **Software and electronic billing eliminate the need for additional billing procedures**
- **Digital x-rays improve diagnostic capability, save the time for developing, mounting and labeling**
- **Digital x-rays eliminate the use of toxic chemicals**







# Cost to Automate

• <b>Software for billing, scheduling, charting</b>	<b>\$9,000</b>
• <b>Sensors (1 set of 3)</b>	<b>\$22,000</b>
• <b>Digitize Panoramic X-ray</b>	<b>\$20,000</b>
• <b>Design, integration, wiring, and hardware including two LCD monitors at each chair, one for the pan, one in the waiting area, and a server</b>	<b>\$25,000</b>
<b>TOTAL</b>	<b>\$76,000</b>

# Capital Cost Comparison

Item	School Clinic	Mobile Van
Renovation	\$66,000	0
Construction	0	\$300,000
Equipment	\$91,000	\$95,000
<b>TOTAL</b>	<b>\$157,000</b>	<b>\$395,000</b>

Difference = \$238,000



**Difference = \$238,000**

**BUT...**

**the van can continue to expand  
school-based services without  
any additional capital cost**

**Adding a second school site  
reduces the difference to  
\$81,000**

# Program Operations

# **School Selection**

- **50% or more of students on subsidized meal program**
- **Cooperative principal and school nurse**
- **Good access for van**
- **Evaluate for placement of shore power**
- **Prior visit by Sealant Program**
- **Avoid competition in neighborhoods where a health center dental clinic exists**

# Distribute Consent Forms

- **Consent forms distributed to all children (no means testing)**
- **Forms collected by school nurse or parent helper**
- **School nurse identifies all children in the school who have reported with dental problems**
- **School nurse specifically seeks consent from those parents**

# **Operating Cost Comparison**

**2-Chair School-based Clinic**

**vs.**

**Mobile Van**

**handout**

# Billing and Collections

Feb. 2004 – Aug. 2004

## UCR

- Care Source \$131,434
- Medicaid \$87,225

**Total: \$218,659**

## ACTUAL

- Care Source \$76,257
- Medicaid \$51,699

**Total: \$127,956  
(58.5%)**

# **Billing and Collections – Uh oh!!!**

**Collections: \$127,956 X 2 = \$255,912**

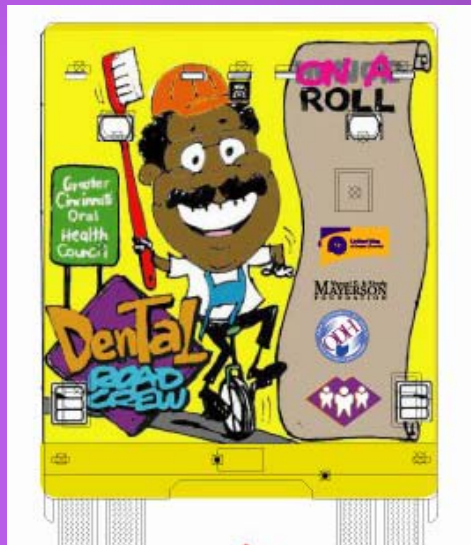
**Cost: \$309,000**

**Deficit: <\$53,000>**



# Cincinnati Funding

- **Ohio Department of Health – Tobacco Settlement Funds**
- **Anthem Foundation of Ohio**
- **Mayerson Foundation**
- **United Way**



# **Exploiter/Entrepreneurs**

- **Problem**

## **Example I**

**Exams, prophys, xrays, sealants**

**No treatment**

## **Example II**

**Nursing Homes**

**Exams, prophys, no treatment**

# **Exploiter/Entrepreneurs**

- **Solution**
  - **Restrictive policies that discourage ethical dentist participation (For every problem there is a solution that is quick, easy, cheap and WRONG)**
  - **Develop practice profiles and work with dental schools for expert consultants**
  - **Sanction the bad boys (gender non-specific)**





**Thanks to:**

**Association of State and  
Territorial Dental Directors**

**American Association for  
Community Dental Programs**

**YOU!!!!!!!!!!!!**