1. **TITLE SLIDE: DESCRIBE THE ARRANGEMENT OF THE DENTAL TREATMENT AREA.** Intraoral dental procedures are performed in the treatment area. Dental treatment areas are also referred to as dental operatories. The treatment area is equipped and arranged to maximize the efficiency of the dental team while providing comfort for the patient and dental team.
2. The arrangement of the dental treatment area is designed to meet the requirements of four-handed, sit-down dentistry. The selection and arrangement of equipment is important for effective practice of four-handed dentistry.
3. All treatment areas designed for four-handed dentistry contain the same basic equipment: a dental unit; a dental chair and operating light; cabinets with sinks; and clinician and dental assistant stools.
4. Some treatment areas are also equipped with an x-ray unit. It is convenient to have an x-ray unit in the treatment room. However because of the cost and space requirements, an x-ray unit may be located in a separate area for a number of clinicians to use as needed.
5. The dental unit holds the dynamic equipment used by the clinician for dental treatment. The exact components of the dental unit can vary according to the needs of the clinician. Typical components of the dental unit include the high and low speed handpieces and the air/water syringe. Included in the unit shown here is a curing light and attachment for an ultrasonic debridement instrument. The movable arm allows flexibility in positioning for patient care.
6. Energy to operate the equipment comes from electricity and an air compressor. The master switch(es) that control the electricity and air is located on the dental unit. (Courtesy A-DEC, Inc., Newberg, OR.)
7. The dental chair, operating light and dental unit are often part of a complete unit.
8. The dental chair is adjustable to allow flexibility in positioning the patient during treatment. (Courtesy A-DEC, Inc., Newberg, OR.)
9. The controls to position the dental chair can be on the back of the chair, on a foot control, or on the dental unit. Many modern dental chairs can be programmed to automatically adjust the chair for correct positioning. (Bottom right slide, courtesy A-DEC, Inc., Newberg, OR.)
10. The operating light provides high intensity light to adequately illuminate the patient’s oral cavity. The operating light can be pole-mounted or mounted on the ceiling. There should be handles on both sides of the light for adjustment by both the clinician and assistant. (Courtesy A-DEC, Inc., Newberg, OR.)
11. There are different delivery systems available and selection depends upon space availability and the clinician’s preference. With the front delivery system, the dental unit is positioned over the patient’s chest. This system allows the dentist to obtain the dental handpieces without having to twist.

Note that the operatory shown here includes a computer. Many dental practices are using computer technology in direct patient care. These technologies include digital radiography, intraoral digital photography and electronic patient charting. (Courtesy A-DEC, Inc., Newberg, OR.)
12. A rear delivery system places the dental unit behind the patient chair near the back of the patient’s head. (Courtesy A-DEC, Inc., Newberg, OR.)
Methods of delivery – side delivery

13. With a side delivery system the dental unit can be placed on either side of the patient’s chair. (Courtesy A-DEC, Inc., Newberg, OR.)
14. This slide shows the clinician's side of the dental treatment area. The main equipment found on the clinician's side of the treatment area includes a clinician's stool, cabinetry with a sink, and an x-ray viewbox.
15. The x-ray viewbox should be located on the cabinetry close to the clinician's stool. The patient’s radiographs are mounted on the viewbox so they are available throughout the procedure.
The sink is an essential component of the treatment area. To eliminate cross contamination when handwashing, sinks should be designed for aseptic technique. This includes a water faucet and soap dispenser controlled by the operator's foot or knee or a faucet activated by an electronic eye. This slide shows a foot operated water faucet. Disposable towel dispensers should allow the operator to remove a towel without touching the dispenser.
17. The dental assistant's side of the treatment area contains fixed cabinetry, a sink, assistant's stool, ...
18. and a mobile cart or bracket table. Instruments and materials used during treatment are arranged on the mobile cart. The mobile cart or table can be positioned over the assistant's lap for easy access to the instruments and supplies during the treatment procedure. (slide on left, courtesy A-DEC, Inc., Newberg, OR.)
19. The equipment used by the assistant to maintain a clear operating field is located on the mobile cart or attached to a flexible arm of the dental unit. (Courtesy A-DEC, Inc., Newberg, OR.)
20. This equipment includes attachments for the high volume evacuator, the saliva ejector and the assistant’s air/water syringe.
21. Most treatment areas are equipped with fixed cabinetry to hold dental materials and supplies used frequently. For infection control, the current trend is to minimize the supplies located in the treatment room to eliminate the possibility of cross-contamination.
22. An amalgamator is used to mix metal alloys and some dental cements used for tooth restoration. The amalgamator mixes the materials together by vigorous shaking. The amalgamator is placed within easy reach for the assistant. It can be stored on the top of the counter or be mounted under a countertop.
23. A curing light is used to harden or "cure" light-cured dental materials such as composite resins, sealants and bonding agents. The light initiates the chemical reaction that causes the material to become hard. The curing light consists of a light wand and a switch to turn the light on and off. The curing light can be a component of the dental unit as shown in this slide.
Alternatively, portable units are available for use when the curing light is not a standard component of the dental unit.
25. All treatment areas should be equipped with a sharp’s container for disposing needles and other contaminated sharps.
   This completes the slide presentation.