```
monitor Dentist {
    int         open = 0; // to check if door can be used or not
    int         num_chair = 0; // used for chair in the treatment room
    int         dentist = 0; // to check if dentist is available or not
    condition   chairs_occupied; // used for chairs in the waiting room
    condition   Dentist_available; // used for if dentist is available or not
    condition   Door; // used for if door is occupied or not
    condition   customer_left; // used for signaling customer left so other one can come in.

get_dental_treatment() {
    while (dentist == 0) wait(dentist_available);
    dentist = dentist - 1;
    num_chair = numchair + 1;
    signal(chair_occupied);
    while (open == 0) wait(Door);
    open = open - 1;
    signal(customer_left);

}

get_next_patient() {
    dentist = dentist + 1;
    signal(dentist_available);
    while (num_chair == 0) wait(chair_occupied);
    num_chair = num_chair - 1;

}

finish_treatment() {
    open = open + 1;
    signal(door_open);
    while (open > 0) wait(customer_left);

}
}
```