

D5. The listPatients() Method

START

```
Declare qChoice and x as integers
Declare go as an integer equal to 1
Declare string outputS to "The members of the queue are: "
While (user wishes to continue) do the following:
  Prompt for and accept qChoice
  Validate qChoice - it must be in the range 1 to MAX;
  If(openFlag[qChoice-1] is True)
    Declare a new clinicPatient array equal to the length of queue of choice
    Call toArray for that queue
    for(x to length of array incrementing by 1 do the following)
      Add patientsArray[x -1] to outputS
    Output patients list
  Ask the user if they would like to continue
End of validation
End of while
```

STOP

D8. The emptyQueue() Method

START

```
Declare qChoice, x and go as integers
While (user wishes to continue) do the following
  Prompt for and accept qChoice
  Validate qChoice - it must be in the range 1 to MAX
  If(openFlag[qChoice-1] is True)
    for(x to theClinic length incrementing by 1) do the following
      Destroy queue at position x in theClinic
```

STOP

D9. The closeQueue() Method

START

```
Declare qChoice, x, targetQ, and go as integers
while(the user wishes to continue) do the following:
  Accept qChoice input
  Validate qChoice - it must be in the range 1 to MAX
  if(openFlag[qChoice - 1] is True)
    while(theClinic[qChoice-1].nFront != null) do the following
      targetQ = findSmallestQ(theClinic, qChoice)
      theClinic[targetQ-1].addRear(theClinic[qChoice-1].nFront.nInfor)
      theClinic[qChoice-1].removeFront()
      theClinic[qChoice-1].destroyMe(qChoice-1)
    End while
  Output success message
```

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    End if
    Else output error message because queue is closed
    Ask the user if they wish to continue
    End validation
    End while
STOP
```