

# OPDSS: A STRATEGIC MANAGEMENT INFORMATION SYSTEM FOR HOSPITAL OUTPATIENT DEPARTMENTS

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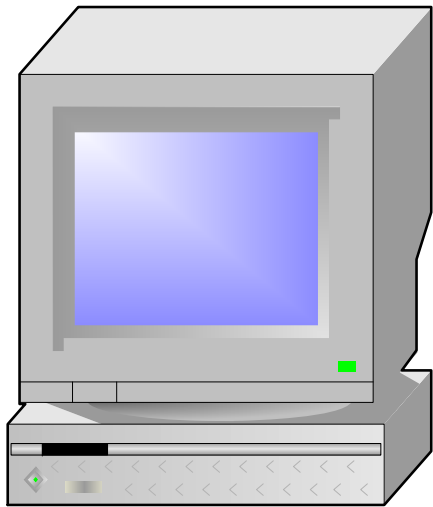


# UNIQUENESS OF OPDSS

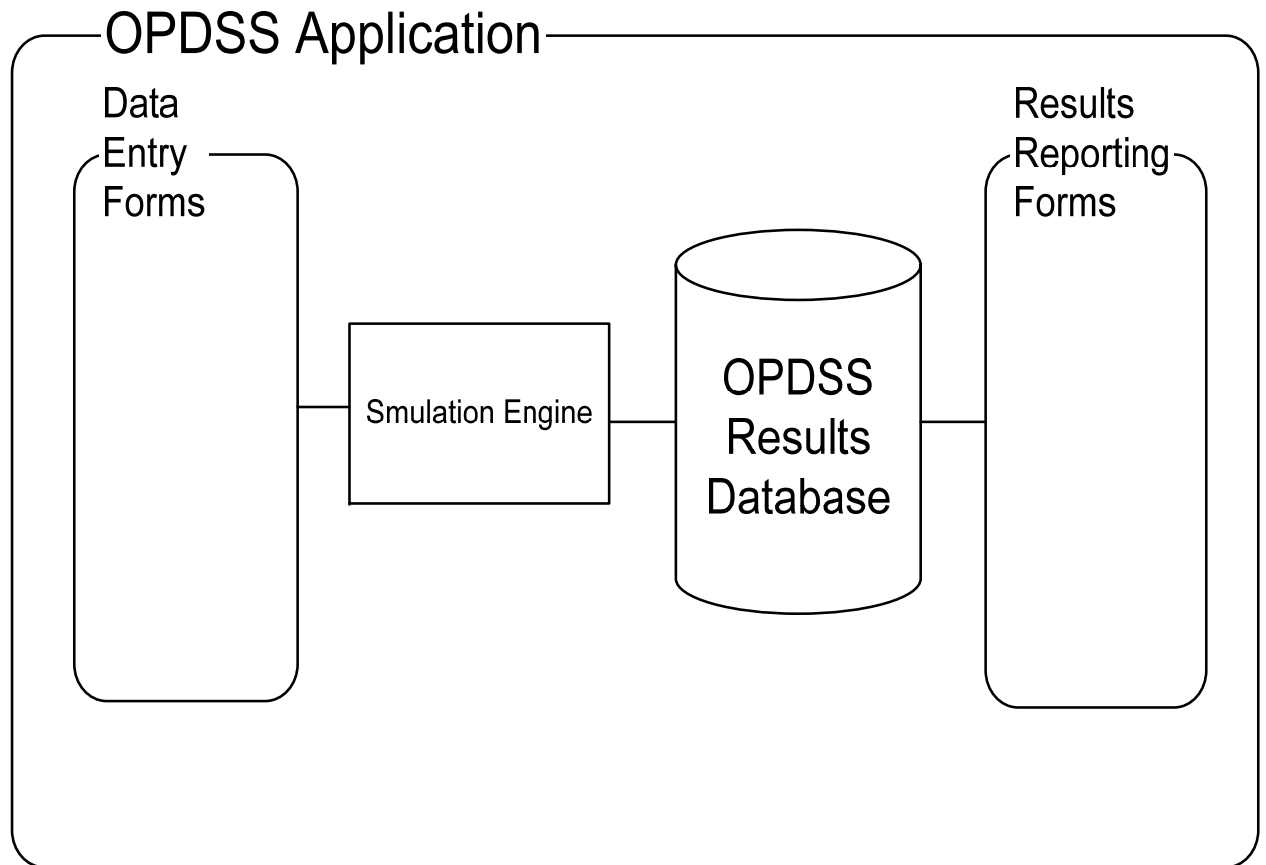
Outcomes modelled using:

- Throughput
- Queues
- Schedules
- Waiting lists
- Patient Failures to Attend

# SYSTEM ARCHITECTURE




Local PC



# SCHEDULING DETAILS

**frm\_create\_quick\_schedule : Form**

 Central Emergency Hospital and  
Health Services Unit

Standard Days: ☒ Monday ☒ Tuesday ☐ Wed ☐ Thurs

Enter morning session start hour:  AM start min:

Enter morning session end hour:  AM end min:

Enter schedule length (weeks):  Enter number of Clinics:

**List of All Sessions**

Sess No	PatientType	Clinic No	DOW	Week	Start	Stop
1	Bone and Joint	1	1	1	8 0	12 0
2	NoEntry	1	1	1	13 0	17 0
3	Bronchoscopy	2	1	1	8 0	12 0
4	NoEntry	2	1	1	13 0	17 0
5	NoEntry	1	2	1	8 0	12 0
6	NoEntry	1	2	1	13 0	17 0
7	NoEntry	2	2	1	8 0	12 0
8	NoEntry	2	2	1	13 0	17 0
9	NoEntry	1	3	1	8 0	12 0
10	NoEntry	1	3	1	13 0	17 0
11	NoEntry	2	3	1	8 0	12 0
12	NoEntry	2	3	1	13 0	17 0
13	NoEntry	1	4	1	8 0	12 0
14	NoEntry	1	4	1	13 0	17 0
15	NoEntry	2	4	1	8 0	12 0
16	NoEntry	2	4	1	13 0	17 0
17	NoEntry	1	5	1	8 0	12 0

# CLINIC DETAILS

## Scheduling Interface

Thurs ☒ Friday ☒ Saturday ☒ Sunday

0 Enter afternoon session start hour: 13 PM start min: 0

0 Enter afternoon session end hour: 17 PM end min: 0

of Clinics: 2 HIC % 13 Receptions 2 Enter default patient pre-arrival time (mins): 15

ile

### All Clinical Labels

Stop **DOUBLE CLICK ON A LABEL BELOW TO ADD SESSION LABEL**

2	0	▲	Amanda Goodie World Famous Surged
7	0	■	Anaesthetics
2	0	■	Anal
7	0	■	ANPM
2	0	■	Antenatal
7	0	■	BOE
2	0	■	Bone and Joint
7	0	■	Breast
2	0	■	Bronchoscopy
7	0	■	Card.Sur.Wound
2	0	■	Cardiac

Click to add new clinical label

Enter new label:

### Default Data Parameters

Enter default patient inter-arrival time (mins): 10

AM Arrivals	PM Arrivals
24	24

FTA % 0

Waiting List Start No: 1000

Weekly Additions 1000

Average time per patient in reception (mins): 10

Enter default appt duration: 10

Number Of Clinicians 1

View Distributions

View Schedule

Next

# LITERATURE REVIEW

- Hashimoto and Bell (1996): single simulation model at one site in one context
- Paul and Kuljis (1995): iconic approach to simulation of outpatient clinics
- Levy, Watford and Owen (1989): isolated simulation model
- Guo, Wagner and West (2004): framework for scheduling rules

# METHODS

- Participant selection
- Data collection:
  1. Pre-usage session
  2. Software usage sessions
  3. Post-session usage survey

# PERCEIVED USEFULNESS

Pre-usage		Post-usage	
<b>Will this tool be useful to you in your day-to-day job?</b>			
Yes	1 (8%)	Yes	1 (8%)
Possibly	5 (42%)	Possibly	2 (17%)
No	5 (42%)	No	6 (50%)
N/A	1 (8%)	N/A	3 (25%)
<b>Will this tool be useful to others in their day-to-day job?</b>			
Yes	6 (50%)	Yes	8 (67%)
Possibly	5 (42%)	Possibly	1 (8%)
No	0 (0%)	No	0 (0%)
N/A	1 (8%)	N/A	3 (25%)



# SOME FEEDBACK

- One user stated that the system “looks aesthetically attractive and easy enough to follow prompts”, but also suggested the application save graphical views of data for subsequent direct comparison.
- Concerns were expressed over the learnability as in some cases users felt they would forget how to use the application between interactions with the system.
- Three users had concerns in relation to aspects of functionality rather than more general HCI issues. These concerns included the inability of the application to deal directly with the distinction between new and returning patients. However, Custom Scheduling does provide this functionality.

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