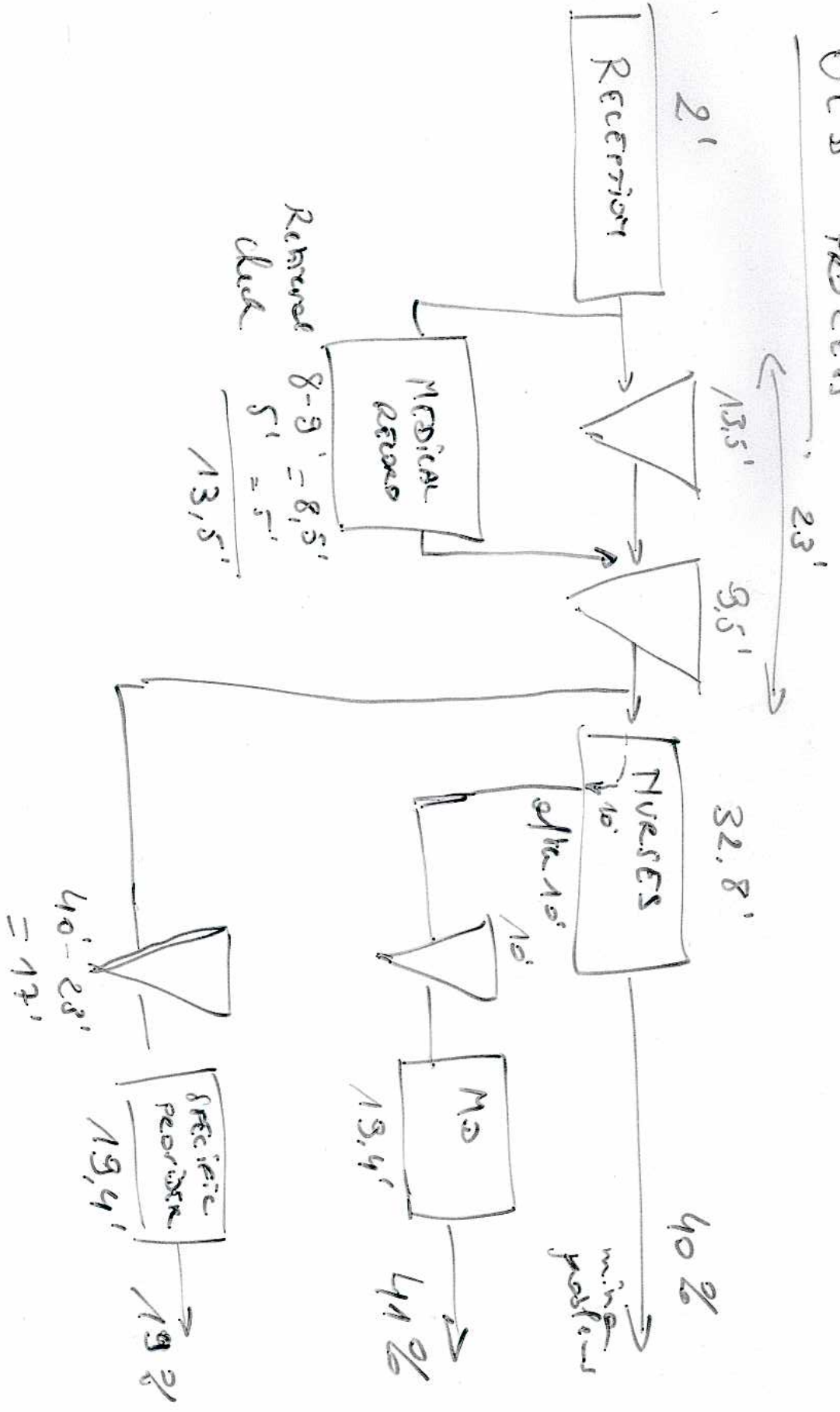
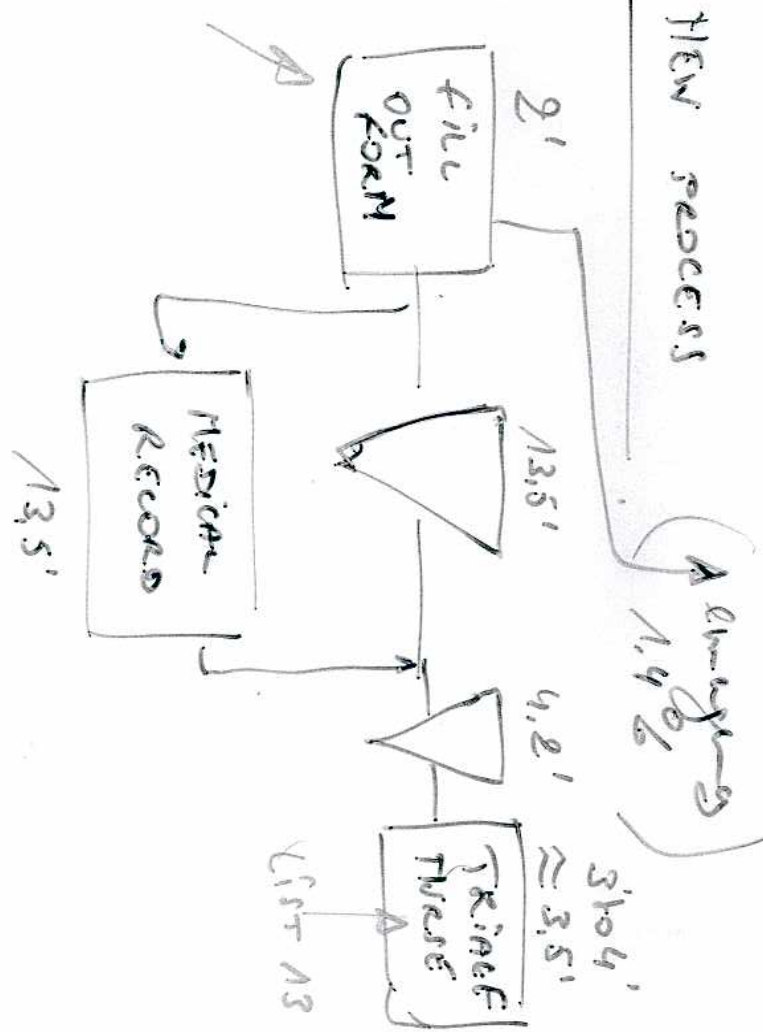


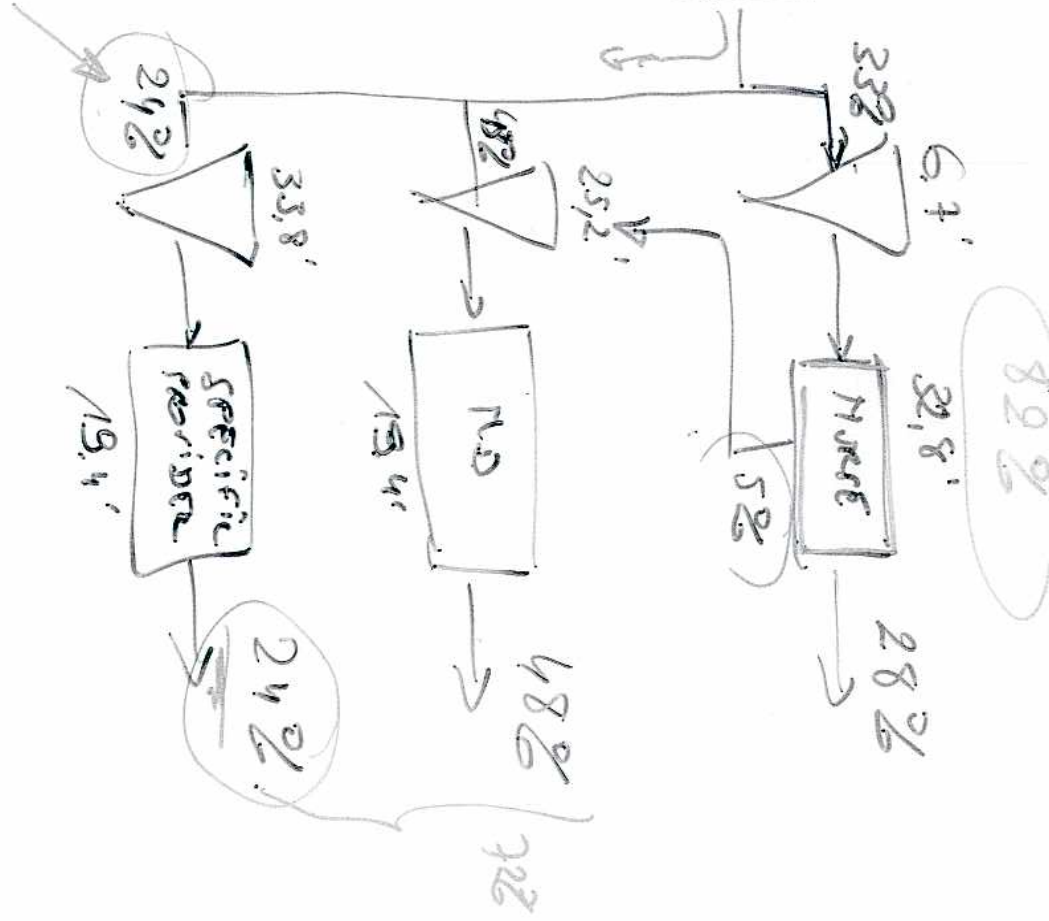
OLD PROCESS



NEW PROCESS



(A savings of 1.4%)



shows we avoid this?

82%

72%

	OLD	NEW
	<u>Nurse</u>	<u>Nurse</u>
	<u>MD</u>	<u>MD</u>
TOTAL WAITING TIME	23'	24, 4' ↗
	33'	42, 5' ↗

TIME in system	23'	33'	44' 21, 5' ↗	46, 4' ↗
NOT TREATED (minus 2')			+ 10' (size)	
			43'	
	23'	23'	17, 7' ↓	12, 7' ↓

WAIT TIME REDUCE
CARE ATTENTION

PATIENTS GOING TO MD 60%

BEING CURED
FEELING CURED

722
HIGHER COSTS

v BRYAN

UTILIZATION RATE $\frac{NO}{Z}$

} # PATIENTS 715 per week
72% GO TO NO

514,8 PATIENTS
13,4' per patient

166,5 HRS / WEEK WORKHOURS

↓ ↓
145 HRS / WEEK CAPACITY. (EXHA)

$$UTILIZATION RATE = \frac{166.5}{145} = 115\%$$

# PATIENTS	<u>Mo</u>	<u>TU</u>	<u>WE</u>	<u>TH</u>	<u>FR</u>
	✓163	✓151	✓126	✓137	✓128

72% ⇒ MD



X 13,41^{power}
in modes

	37,5	35,2	34,7	34,5	29,8
	29,5	28	28	28,5	31

CAPACITY	UTIL. RATE
✓123%	✓126%
✓113%	✓112%
	56%

115% ⇒ 90%

f < 100%

+ 40 hrs extra
MD time

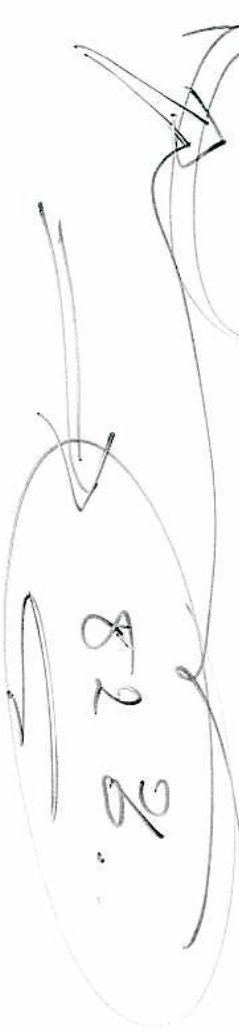
Nurses

	MO	TU	WE	TH	FR
# PATIENTS	163	151	136	133	128

3.3% \Rightarrow Nurses 54 50 45 45 42

TRANSMISSIONS TIME = 32.8' per patient
25.4 27.2 24.5 24.7 23.1
31.5 31.5 31.5 31.5 31.5

TIME AVAILABLE 31.5 31.5 31.5 31.5 31.5
UTIL RATE 53% 86% 78% 78% 73%

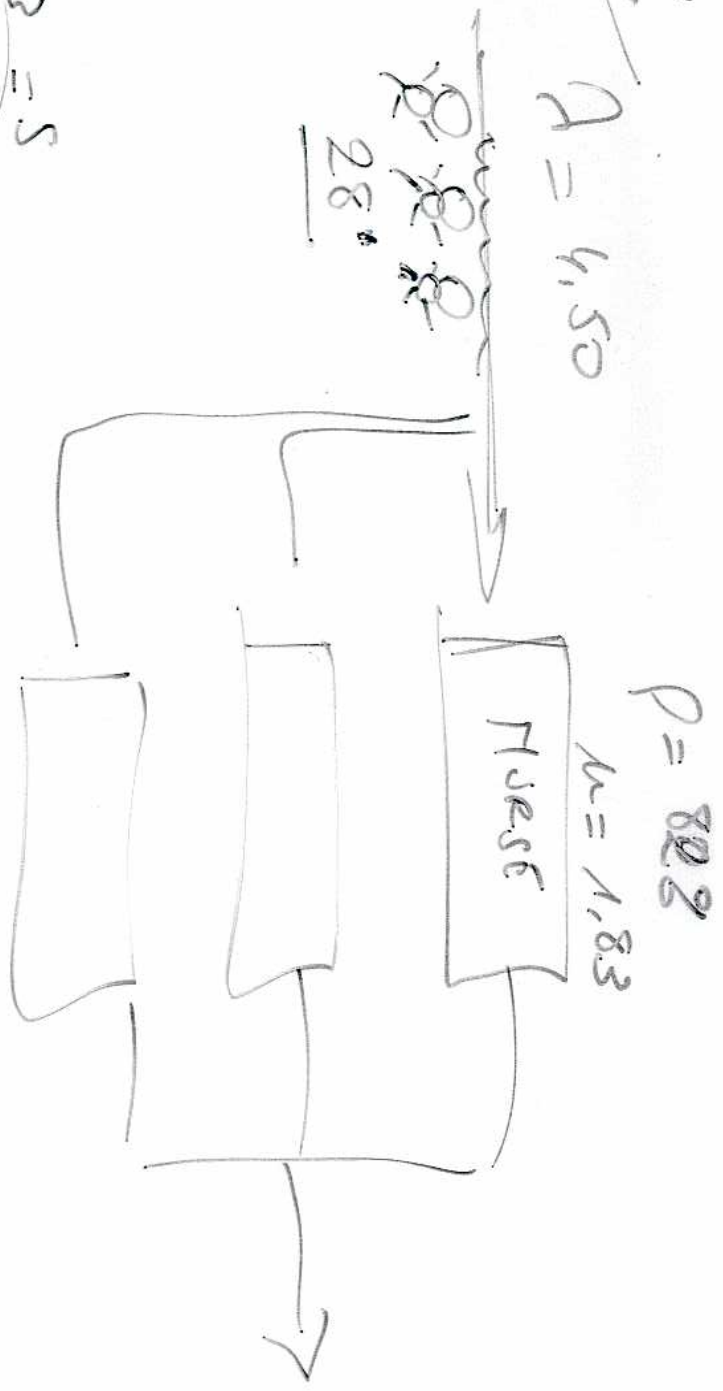


- CAPACITY
- TRIAGE NURSE + MED. DOCTOR
 - SPARE DOCTORS " DOCTOR " ON CALL
 - LESS TIME/PATIENT = LESS ADMIN WORK.
 - HIRE A DOCTOR.
-

- SCHEDULING
- CHANGE LIST OF 13 DISEASES
 (ADD SOME TO THE LIST)
 → SHIFT BOTTLENECK TO NURSE??
 → DO-ABLE??
 - ASK MD TO SCHEDULE ACCORDING TO INFLOW OF PATIENTS PER HOUR + PER DAY
-

- MANAGE DEMAND
- GIVE APPOINTMENTS TO SOME CASES → FRIDAY
 - SEND PATIENTS HOME
 - SEND PATIENTS FOR SPECIFIC MD TO PRIVATE OFFICE
 - INCREASE FEE

33%
 $\lambda = 4.50$



$N = 3 = S$
 $\rho = 0.82$

Processing Rate = $\mu = \frac{60}{32.8} > 1.83$ 32.8' / patient

$\rho = \frac{\lambda}{\mu S} \Rightarrow 0.82 = \frac{\lambda}{1.83 \times 3} \Rightarrow \lambda = 4.50$

EXPECTED PATIENTS IN QUEUE = 2.13

EXPECTED TIME IN QUEUE = $\frac{L_q}{\lambda} = \frac{2.13}{4.5} = 0.47$ hrs

28'