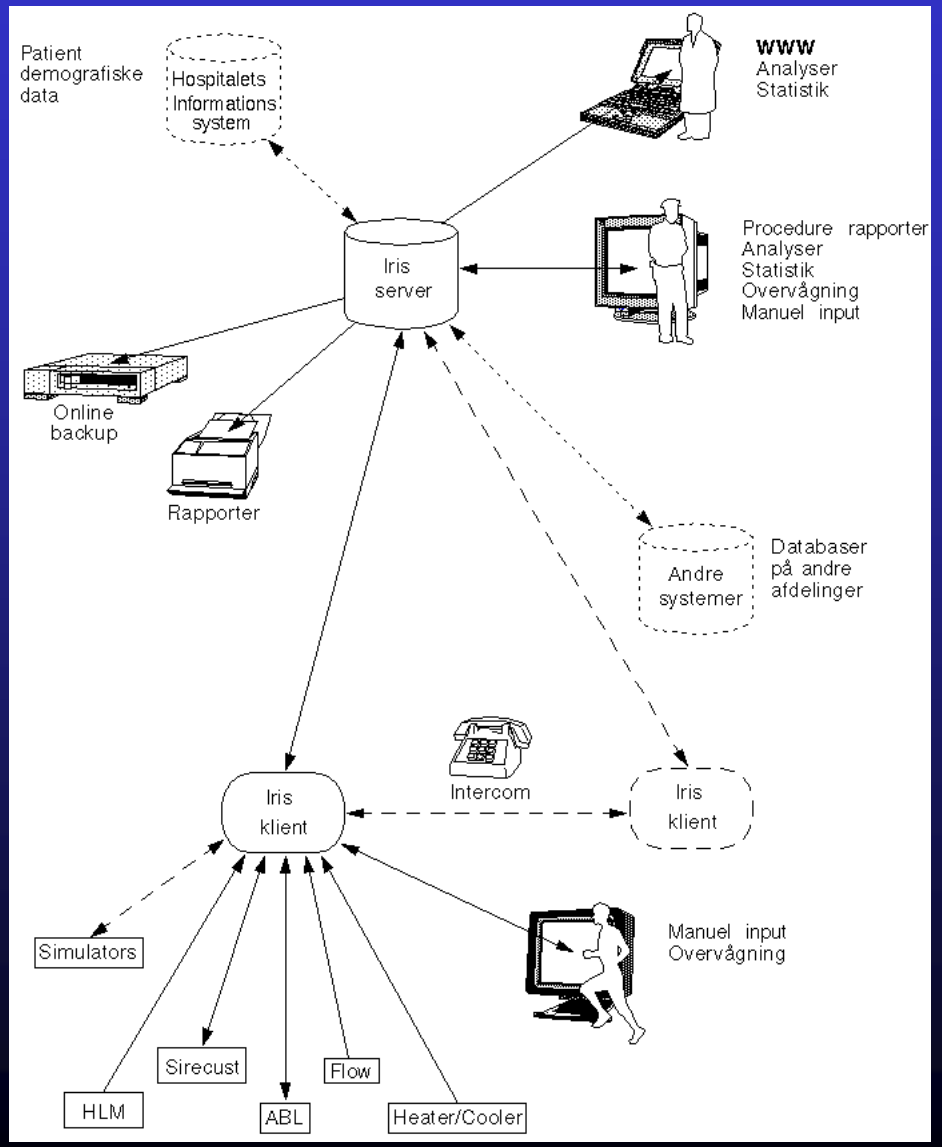
Formål

- Individuel dokumentation af et ECC- eller assist forløb
- Produktionskontrol (herunder kvalitetssikring og registrering af utensilie- og væskeforbrug)
- Forskningsværktøj

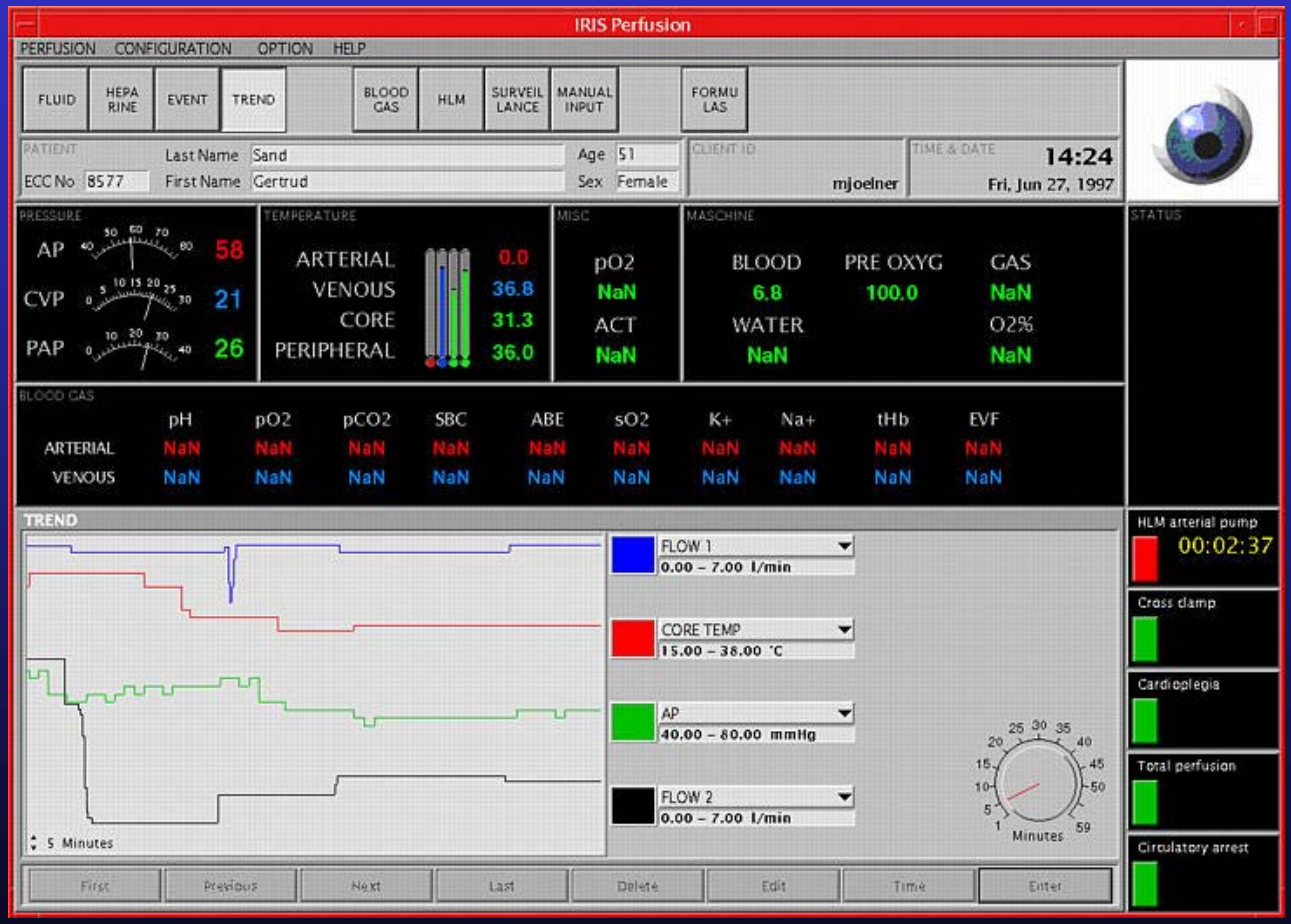
IRIS-systemet

- Platformsuafhængigt
- Mange rapporterings-muligheder
- Mulighed for adhoc udtræk
- Høj kvalitet af data i database
- Tidssvarende stabilt hardware
- Højt datasikkerheds niveau
- Let at integrere til andre databaser
- Online backup
- Veldokumenteret
  http://tiris-serv.mta.auh.dk/doc/



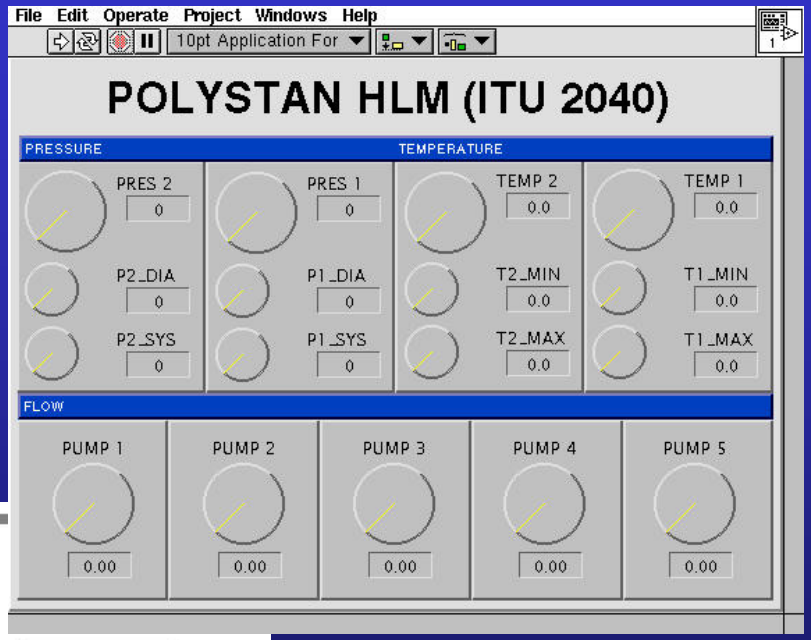
IRIS-klienten

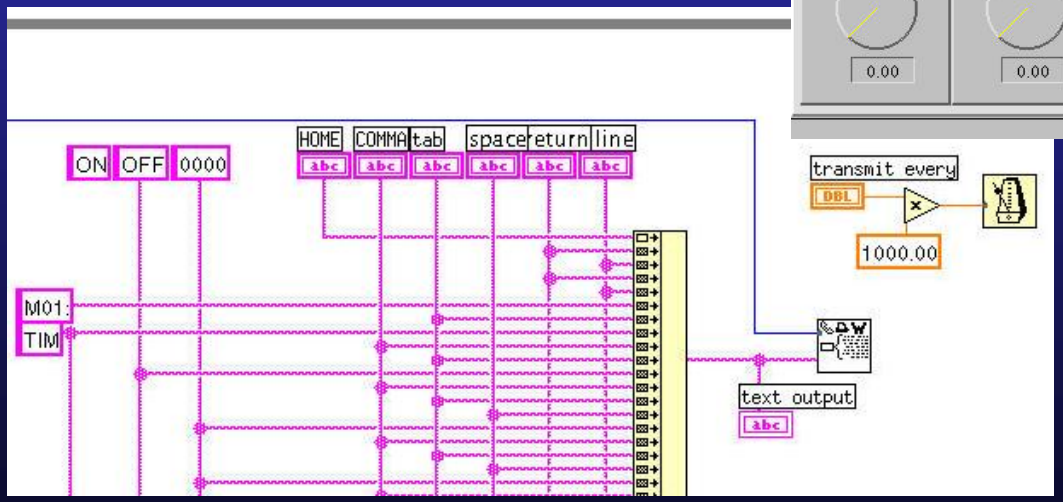
- Præsentation



IRIS-klienten

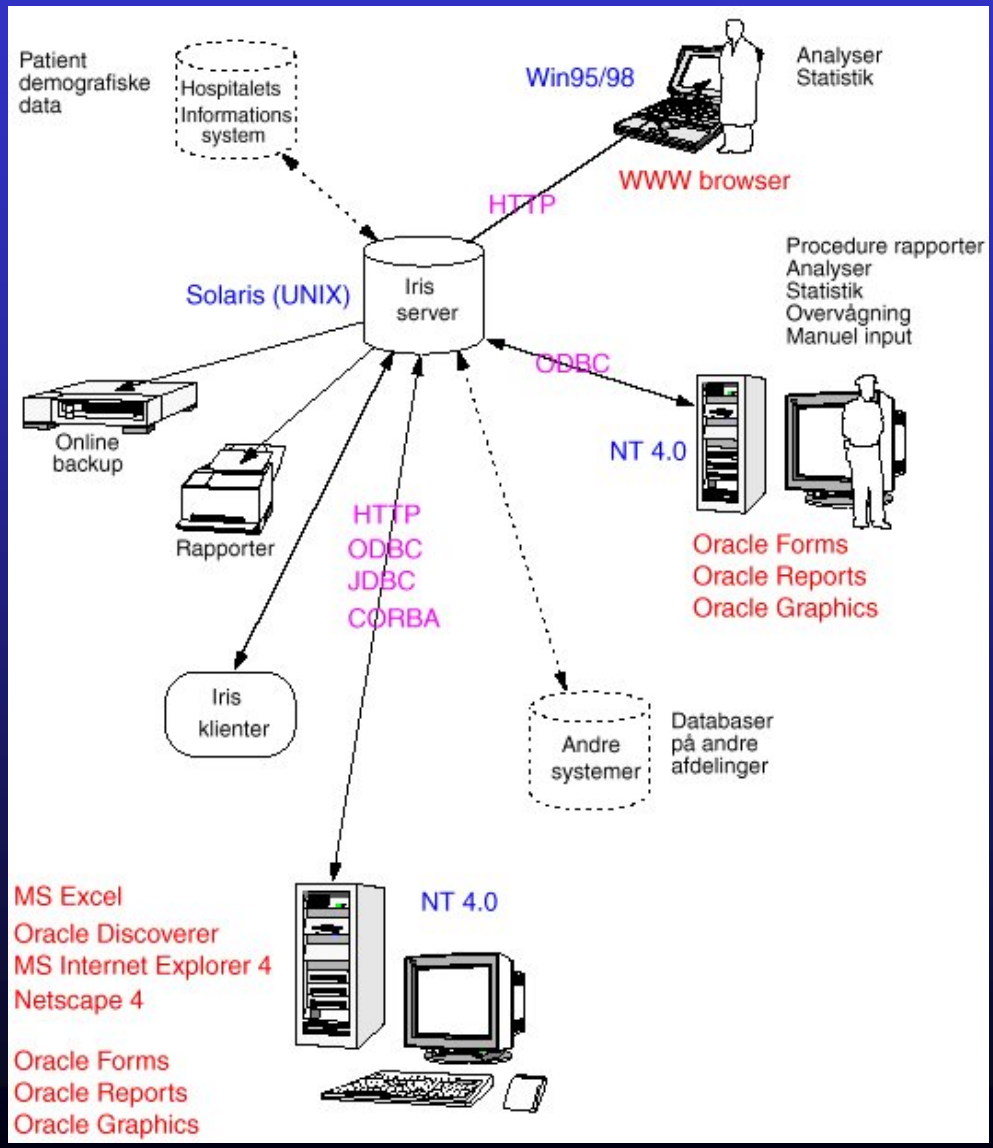
- LabVIEW





IRIS-serveren (Oversigt)

- Åben arkitektur med nutidens standarder og protokoller
- **HTTP**
  (HyperText Transfer Protocol)
- **ODBC**
  (Open DataBase Connectivity)
- **JDBC**
  (Java DataBase Connectivity)
- **CORBA**
  (Common Object Request Broker Architecture)
- Skalerbar



IRIS-serveren (Datasikkerhed)

- Klassificerede brugergrupper

  Administrator
  Har adgang til læsning og skrivning i hele databasen.
  Kan oprette og slette brugere.

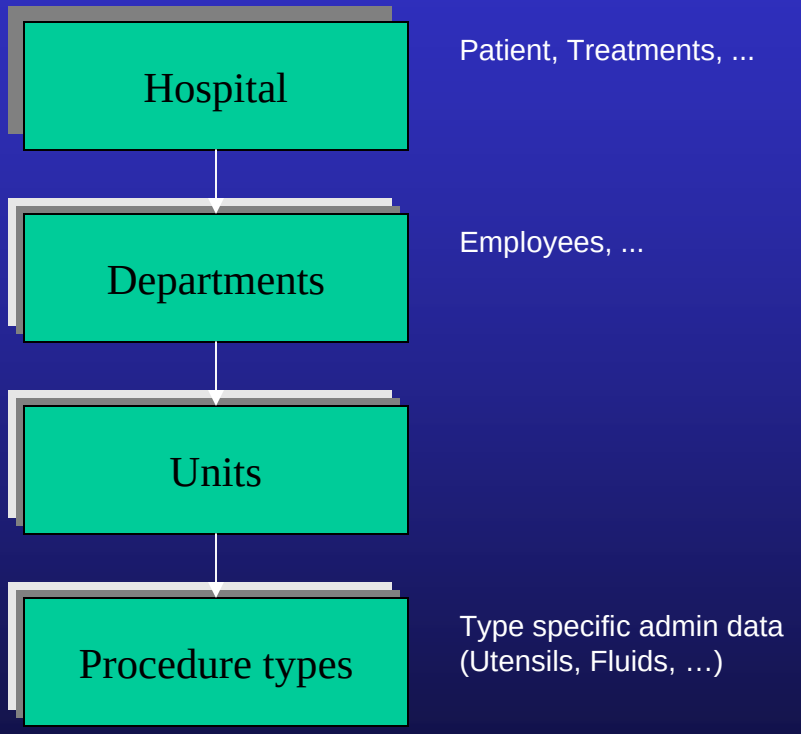
  Daglig bruger
  Har adgang til læsning og skrivning i databasen i forbindelse med daglig drift og vedligehold.

  Gæst
  Har adgang til læsning af udvalgte data i databasen.

- Auditering på brugerniveau
  Logning af brugerinformationer samt læsning og skrivning af følsomme patientdata.

IRIS-serveren (Datamodellen 1)

- Designet efter brugernes behov og krav
- Forberedt for forskellige procedure-typer (CPB, Assist, …)
- Grundsten i datamodel nemme at udvide med nye proceduretyper
- Nem at integrere med andre databaser
- Se A1 plots !

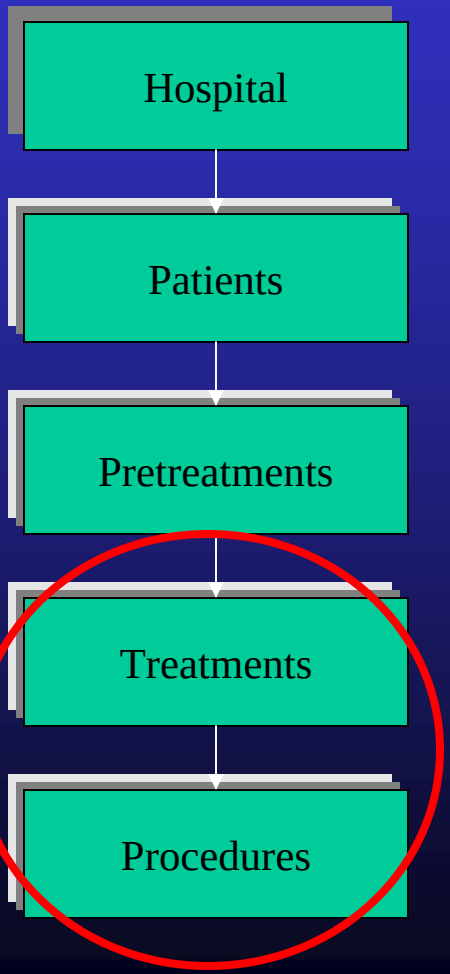


ER diagram 1

Acrobat Document

IRIS-serveren (Datamodellen 2)

- Designet efter brugernes behov og krav
- Grundsten i datamodel nemme at udvide med nye procedure data
- Nem at integrere med andre databaser
- Se A1 plots !



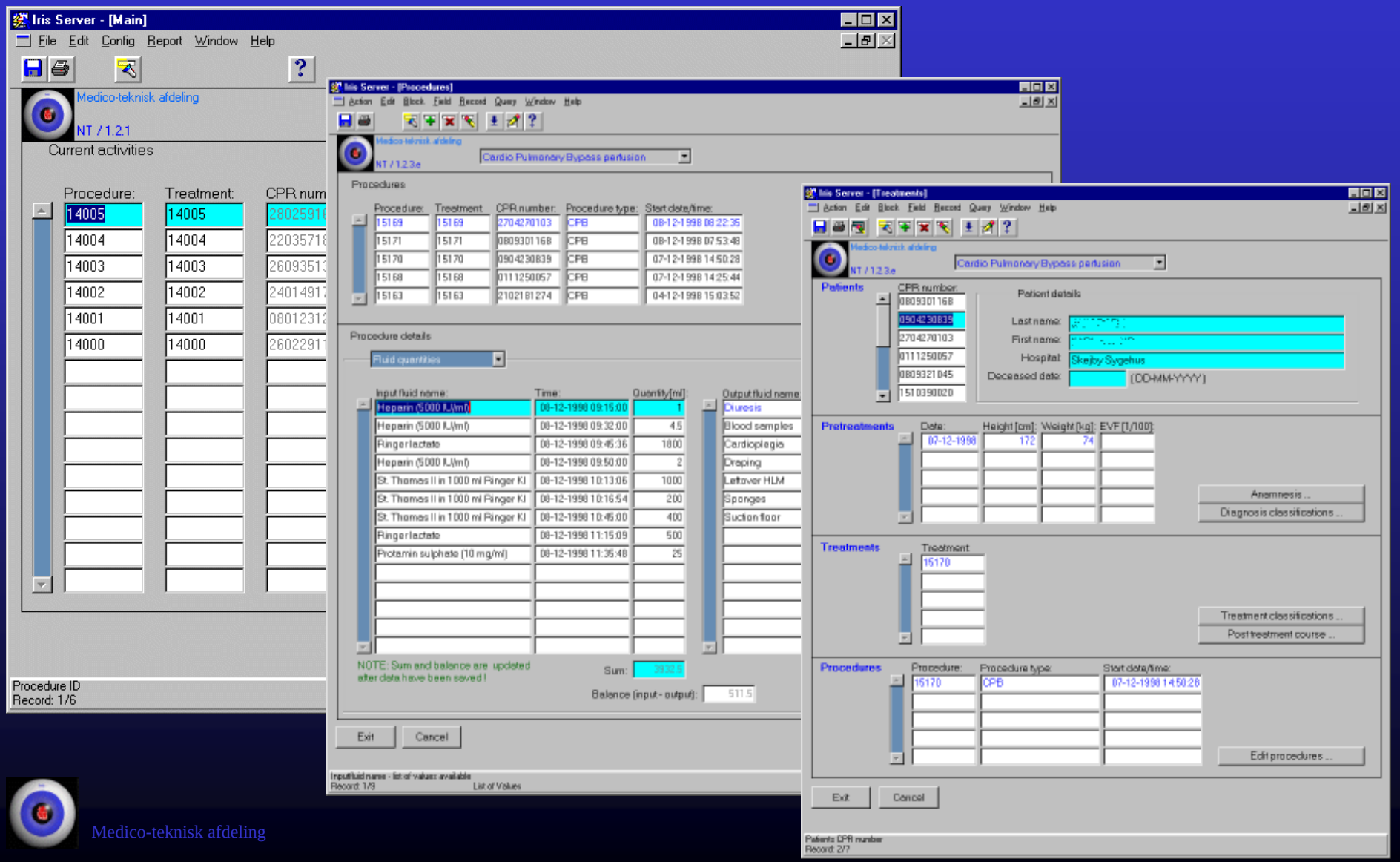
ER diagram 2

Acrobat Document

IRIS-serveren (Data - nu og senere)

- Alle administrative data, som er nødvendige for at kunne lave perfusionsrelaterede rapporter
- Alle “lavfrekvente” data fra udstyr
- Alle “højfrekvente” data fra udstyr (dataware house teknik)
- Forbindelser til andre databaser på SKS
- Stregkoder til væsker og utensilier

IRIS-serveren (Daglig brugerfunktionalitet)



IRIS-serveren (Daglig rapportering)

PERFUSION REPORT

Aarhus University Hospital, Skejby Sygehus
T-perfusion
Department of Thoracic and Cardiovascular Surgery

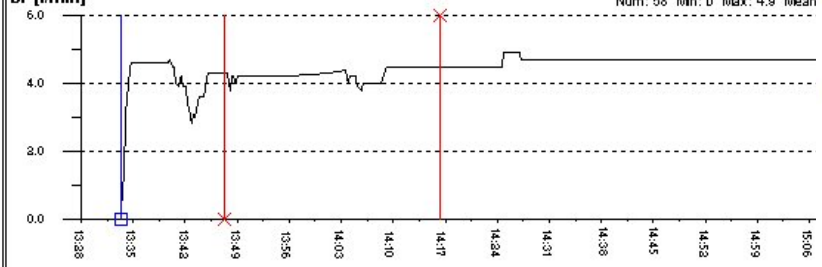
Report date: 21-05-2002 11:33
Procedure: **18361** 17-05-2002 Page 3 of 4

Adobe Acrobat Document

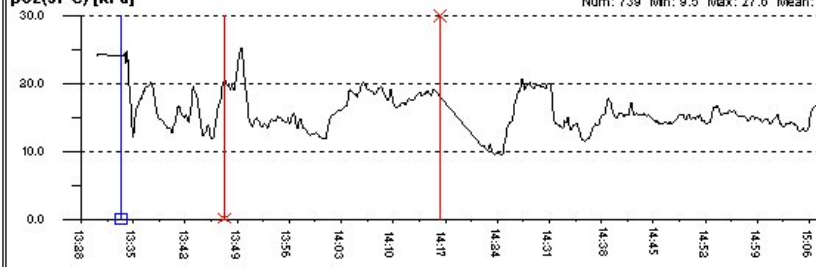
Other data:

Name	Type	Min time	Max time	Num	Min	Max	Mean	Unit
BF	Arterial	17-05 13:32:31	17-05 15:23:52	58	0.00			
POP		17-05 13:32:31	17-05 15:23:52	249	20.00	3		
VT		17-05 13:32:31	17-05 15:23:52	93	28.50			
WT		17-05 13:32:31	17-05 15:23:52	83	35.20			
AT	Arterial	17-05 13:31:18	17-05 15:19:42	142	22.90			
ABE	Arterial	17-05 13:35:05	17-05 15:19:00	100	-23.00			
K+	Arterial	17-05 13:31:00	17-05 15:18:24	97	3.00			
sO2	Venous	17-05 13:30:54	17-05 15:23:17	582	0.62			
HCT	Venous	17-05 13:31:24	17-05 15:23:17	311	19.00			
pO2(37°C)	Arterial	17-05 13:30:54	17-05 15:23:05	739	9.50			
pH(37°C)	Arterial	17-05 13:34:53	17-05 15:22:53	53	6.58			
pCO2(37°C)	Arterial	17-05 13:35:05	17-05 15:20:42	224	1.60			
O2%		17-05 13:32:31	17-05 15:23:52	77	21.00			
Gas flow		17-05 13:34:36	17-05 15:15:50	45	0.90			
MAP		17-05 13:30:43	17-05 15:31:02	402	49.00	1		
CVP		17-05 13:30:43	17-05 15:30:43	231	3.00			
CT		17-05 13:30:43	17-05 15:29:50	36	35.70			
PT		17-05 13:30:43	17-05 15:26:31	27	34.00			

BF [l/min] Num: 58 Min: 0 Max: 4.9 Mean



pO2(37°C) [kPa] Num: 739 Min: 9.5 Max: 27.6 Mean:



MAP [mmHG] Num: 402 Min: 49 Max: 168 Mean:

HLM:

8978 Hjertelunge maskine Jostra

Oxygenators:

1 Adult QUADROX HMO 1000

Cannulas and catheters:

1 Aortic cannula 7.0 8802
1 Two-stage venous catheter, 9cm tip 91251C

Core temperature position: Nasopharyngeal

Fluid balance: ([ml])

Input:		Output:	
Heparin	9.0	Blood samples	10.
Infusion / Crystalloids	2700.0	Leftover HLM	1000.
Protamin	25.0		1010.
	2734.0		

Gain (input-output): 1724

Staff:

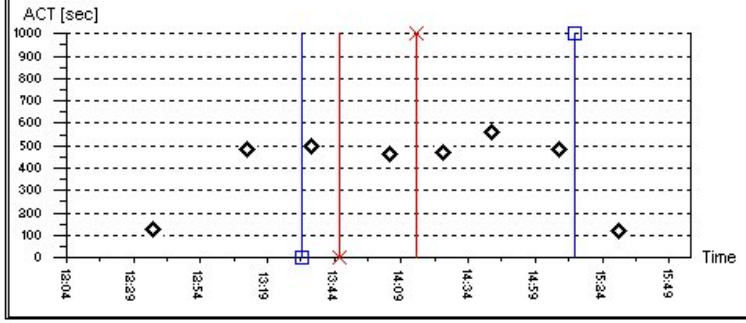
Anaesthesiologists : BHN (1),
Perfusionists : ER (1),
Surgeons : MJ (1),

Coagulation course:

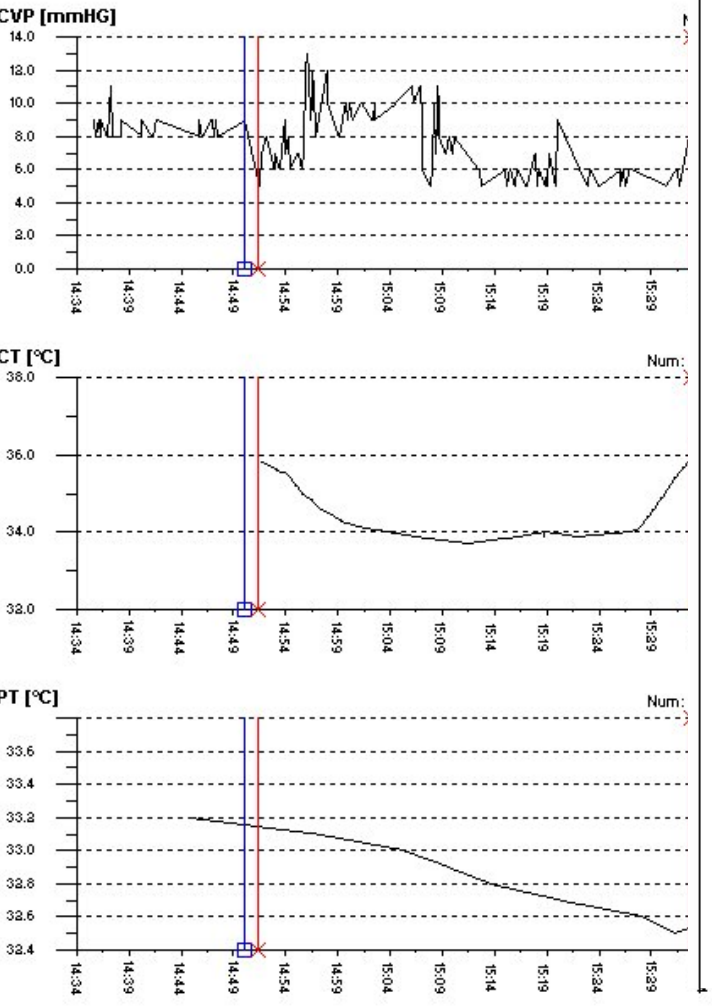
Heparin / Protamin:

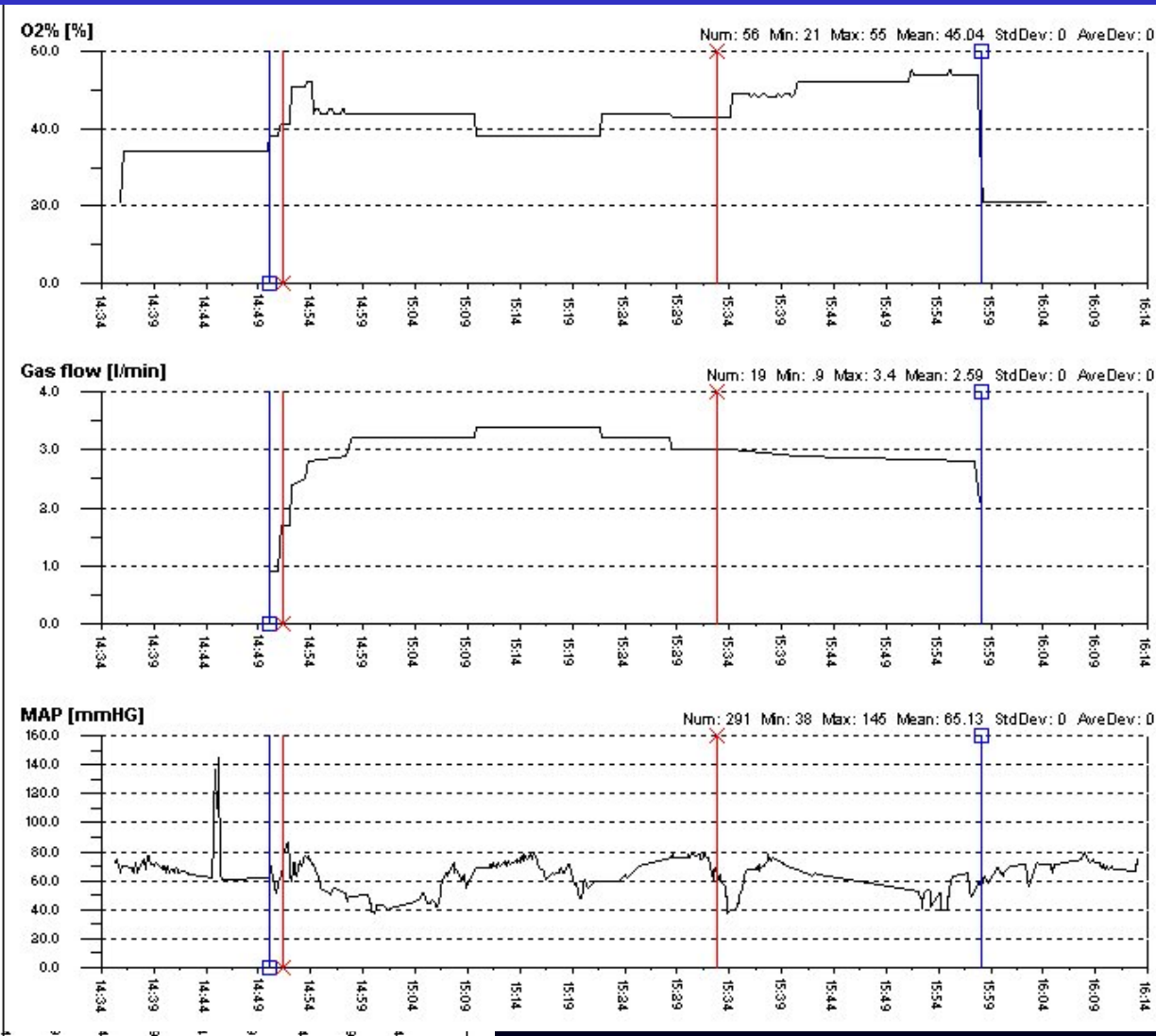
17-05 12:00	1.0[ml]	5000[IU]	Heparin (5000 IU/ml)
17-05 13:05	5.0[ml]	25000[IU]	Heparin (5000 IU/ml)
17-05 13:24	1.0[ml]	5000[IU]	Heparin (5000 IU/ml)
17-05 14:16	1.0[ml]	5000[IU]	Heparin (5000 IU/ml)
17-05 14:37	1.0[ml]	5000[IU]	Heparin (5000 IU/ml)
17-05 15:22	25.0[ml]	250[mg]	Protamin sulphate (10 mg/ml)

ACT [sec]



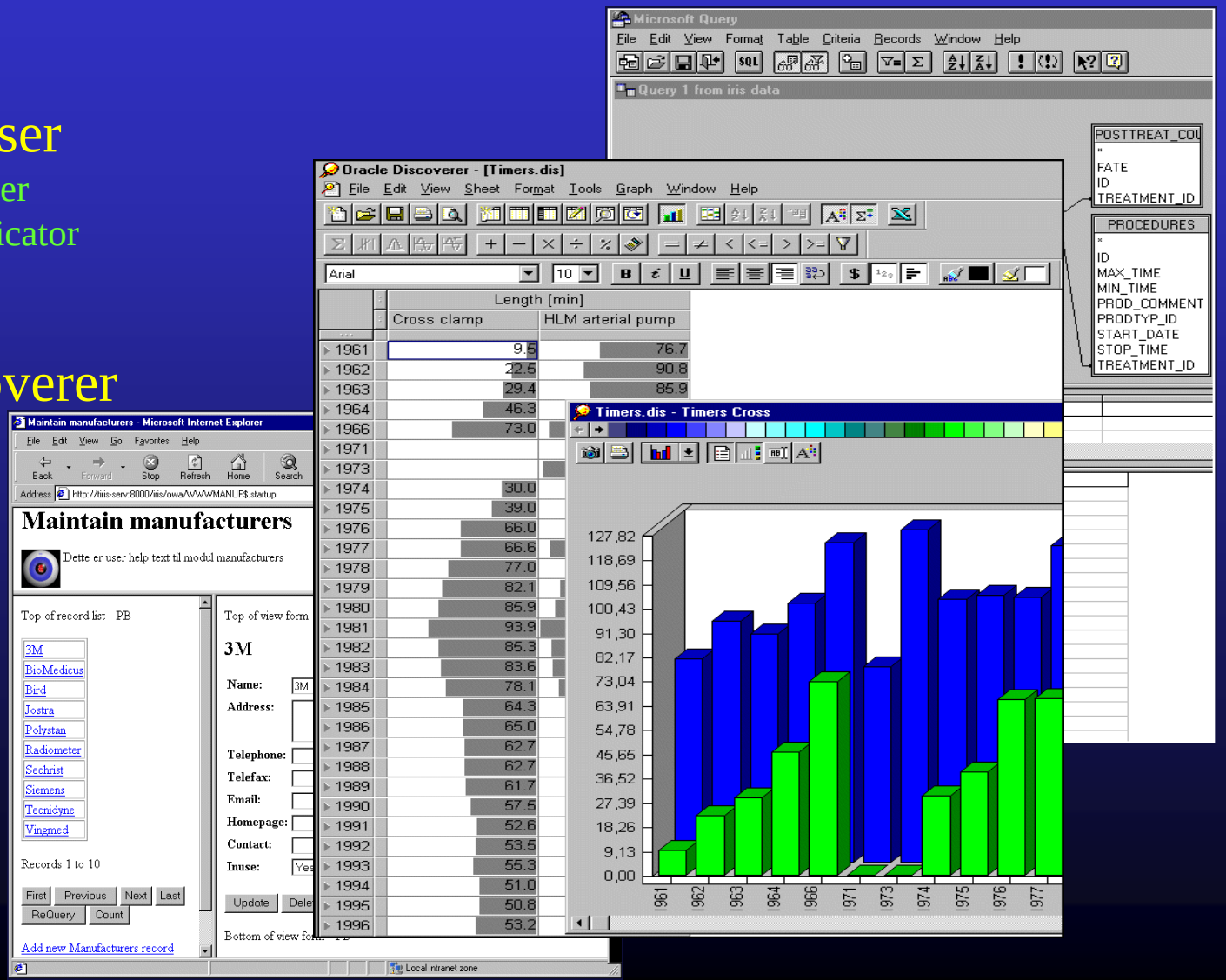
IRIS-serveren (Daglig rapportering)

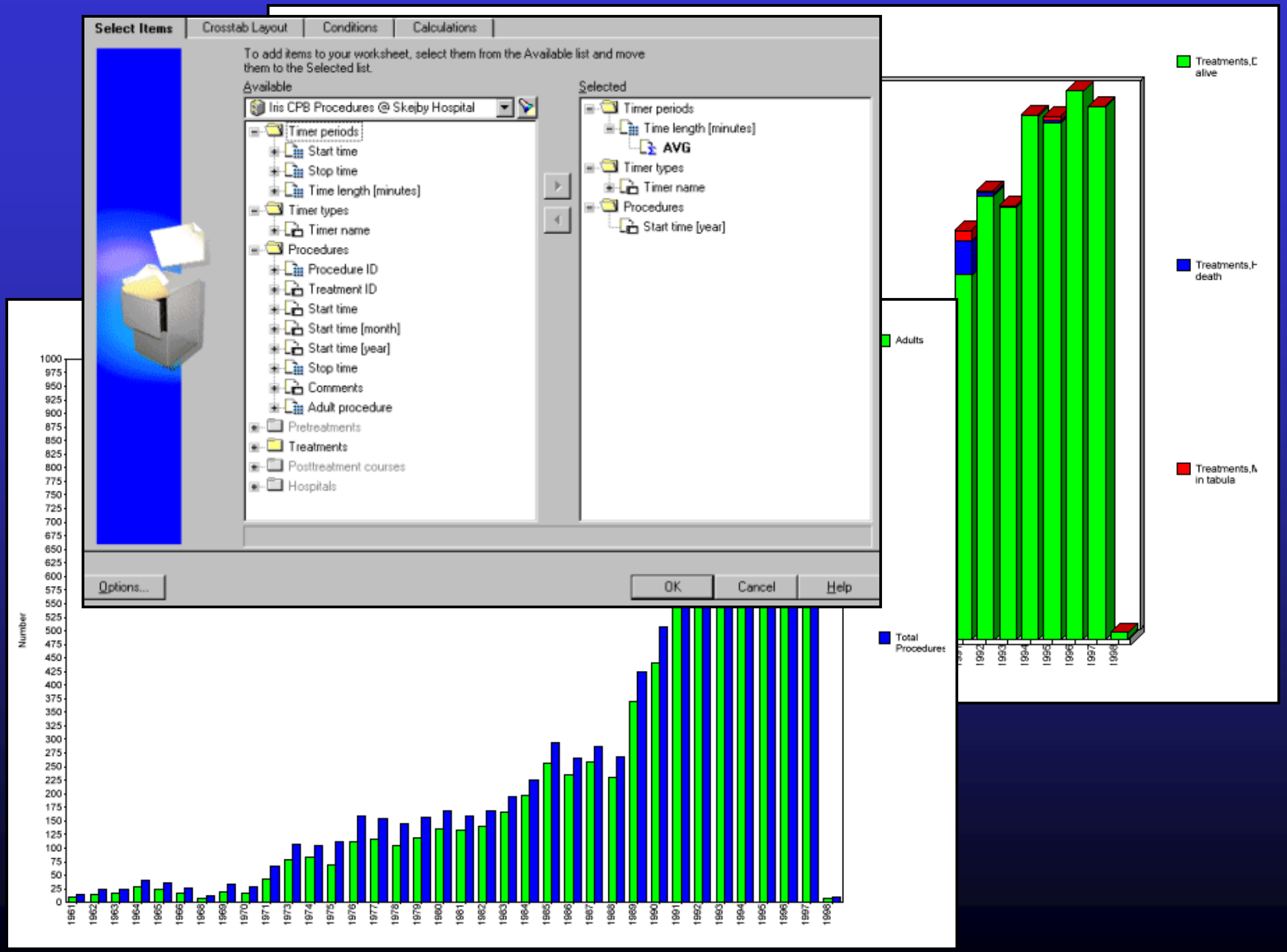




Andre udtræksmuligheder fra databasen

- WWW browser
  - MS Internet Explorer
  - Netscape Communicator
- MS Excel
- Oracle Discoverer




Select Items
Crosstab Layout
Conditions
Calculations
To add items to your worksheet, select them from the Available list and move them to the Selected list.
Available
Iris CPB Procedures @ Skejby Hospital
Timer periods
Start time
Stop time
Time length [minutes]
Timer types
Timer name
Procedures
Procedure ID
Treatment ID
Start time
Start time [month]
Start time [year]
Stop time
Comments
Adult procedure
Pretreatments
Treatments
Posttreatment courses
Hospitals
Selected
Timer periods
Time length [minutes]
AVG
Timer types
Timer name
Procedures
Start time [year]
Options...
OK
Cancel
Help
Number
Adults
Total Procedures
Treatments,C alive
Treatments,I death
Treatments,N in tabula