

SAIRAALALIITTO

**XV Valtakunnalliset terveydenhuollon atk-päivät
23. - 24.5. 1989 hotelli Meri-Yyteri, Pori**

**Konsult Lars Wärvik
Norrdatab AB**

MIS SOFTWARE - TRANSITION 1

Transition

The Problem

To deliver high quality health care
using fewer resources
while addressing the demand for
more services

YOU DO NEED

- Product-Line Management
- A Responsibility Structure
- Comprehensive Variance Analysis
- Budgeting Based on Standard Costs and Volume Forecasts

Transition

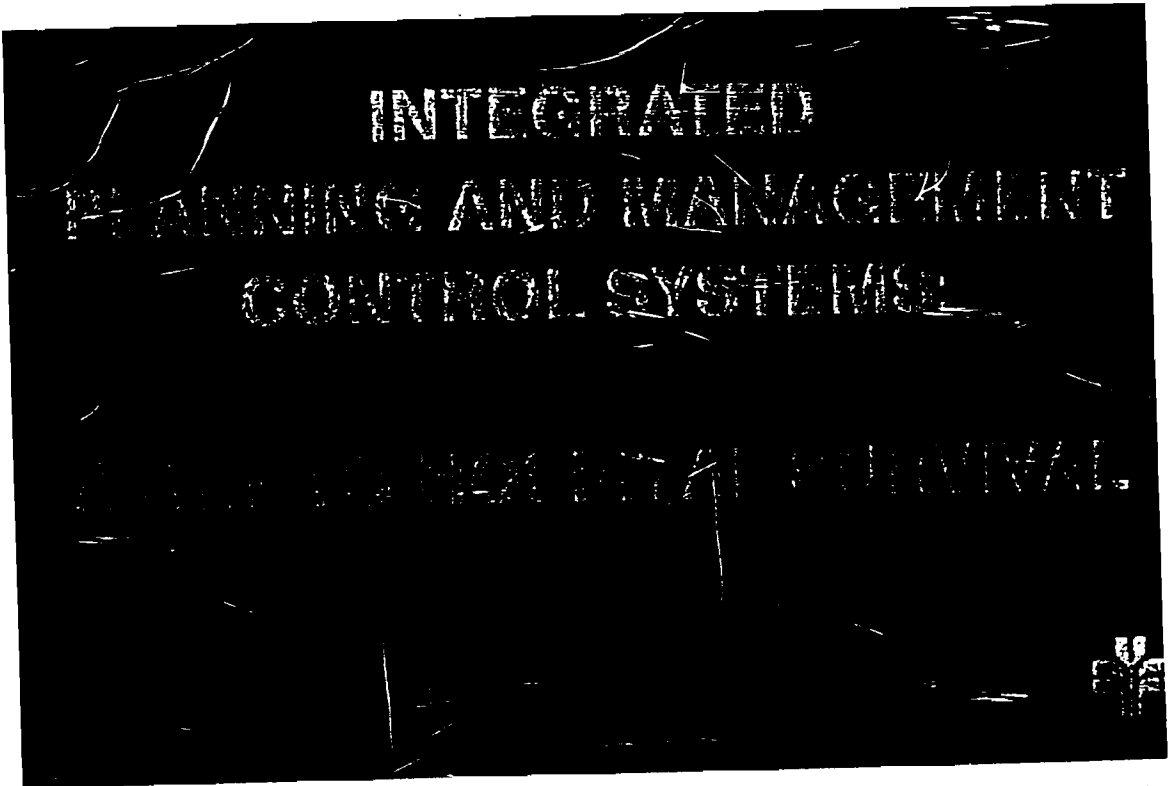
MANAGEMENT QUESTIONS

- **What is the true cost of DRG 106?**
- **What should be the price for an uncomplicated CABG?**
- **How will a new liver transplantation program affect hospital costs?**
- **Which clinical departments and DRGs are the most profitable?**

- **Which clinical departments and physicians are managing resources effectively?**
- **How much of the hospital expense variance is due to changes in physician practice patterns?**
- **For which in-house patients is resource utilization exceeding protocol?**

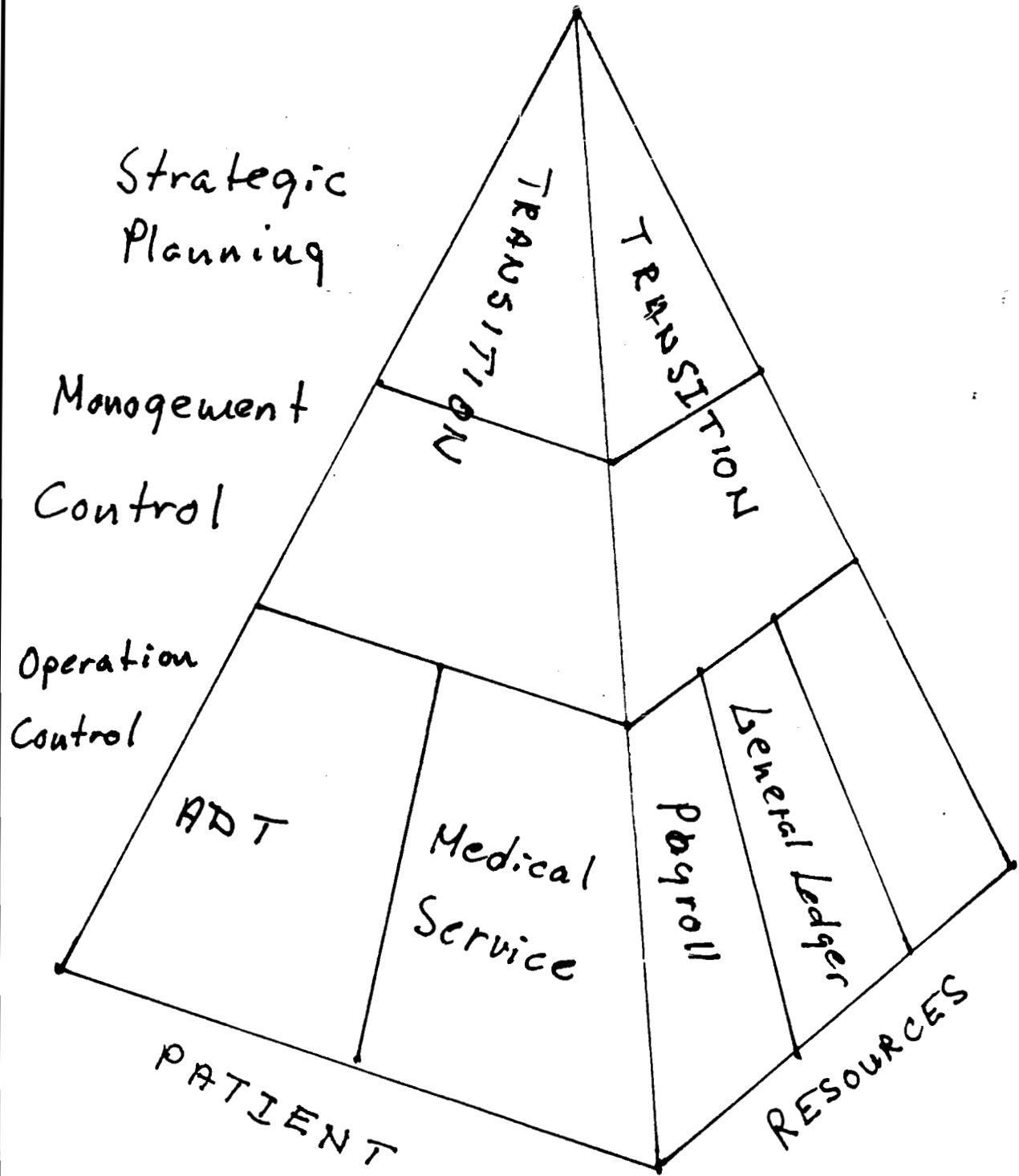
INORRDATA

Transition



NORRDATA

Transition



Transition

INFORMATION AND FEEDER SYSTEM

General ledger

Payroll

RESOURCES

Lab system

ADT system

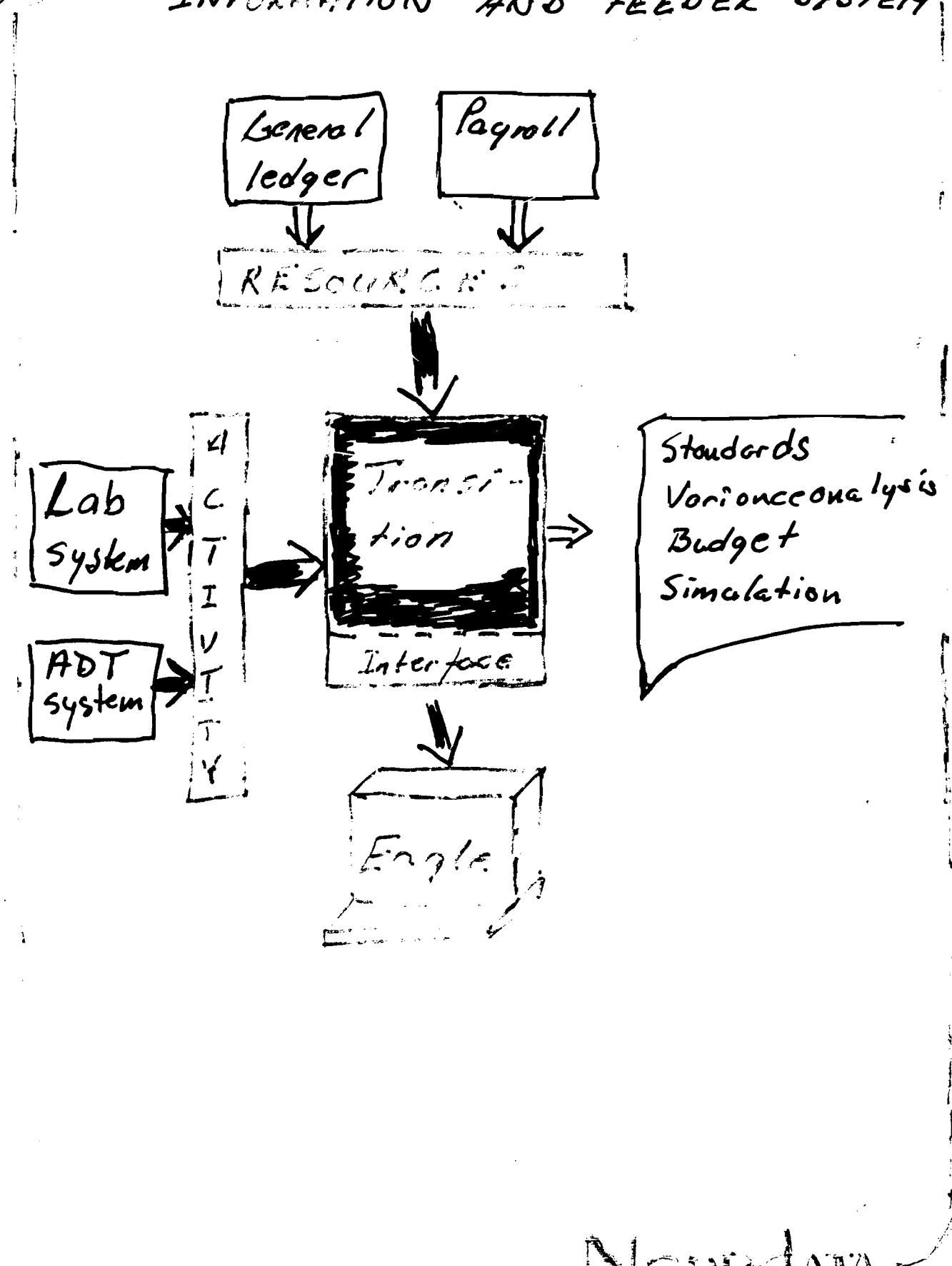
ACTIVITY

Transition Interface

Standards
Variance analysis
Budget
Simulation

Engle

NONRATA



Transition

Transition

INTERMEDIATE PRODUCTS

Example: Radiology

PROCEDURES

INTERMEDIATE PRODUCT

END PRODUCT

(24004/ultrasound)
ULS

Ultra sound
9411

Ultra sound
stone

Ultra sound

Chemistry
Op

DRG
125

ICD-9

Transition

4

INTERMEDIATE PRODUCTS
IN UPPSALA

	<u>1987</u>	<u>1989</u>
Chemistry	128	225
Physiology	50	111
Radiology	50	325
Blood bank	51	63
Neurophysiology	26	27
Pathology	16	50

Transition

TO BUILD STANDARD COST

1. Define intermediate products
2. Determine cost types

- | | |
|--|--|
| <input type="checkbox"/> Variable labor | <input type="checkbox"/> Fixed labor |
| <input type="checkbox"/> Variable supply | <input type="checkbox"/> Fixed equipment |
| <input type="checkbox"/> Variable others | <input type="checkbox"/> Fixed building |
| | <input type="checkbox"/> Fixed others |

Transition

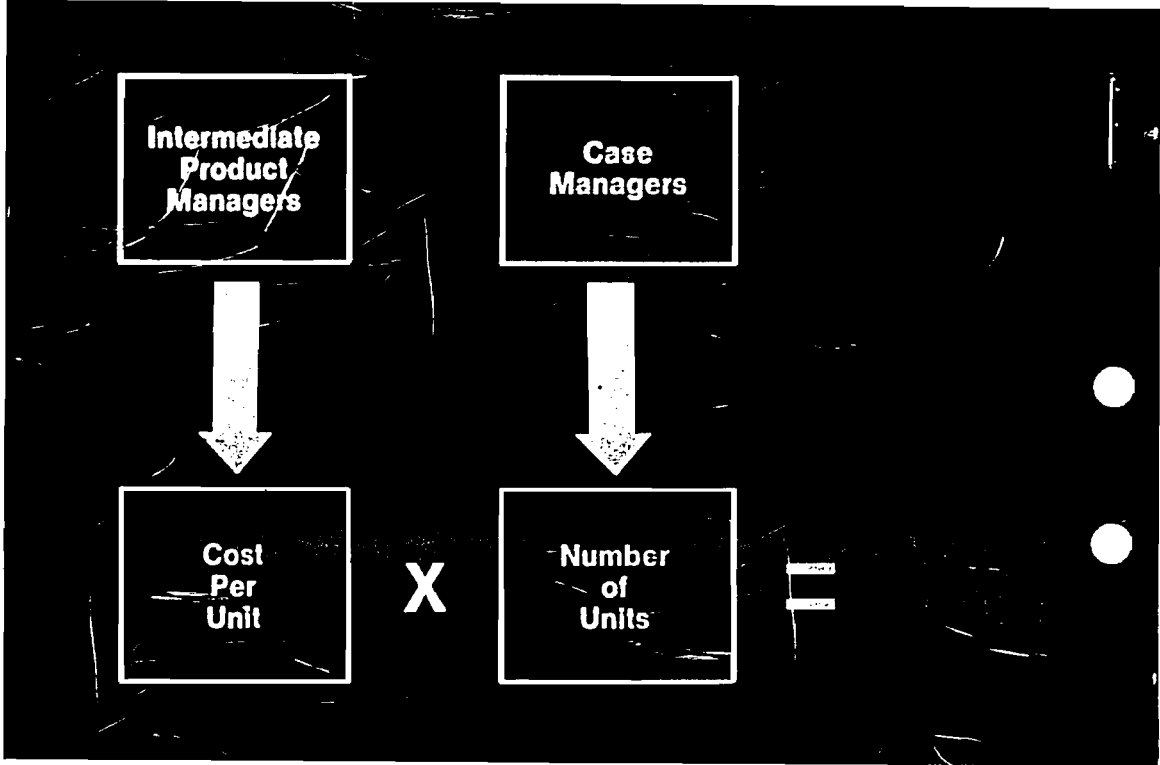
Transition

VARIABLE LABOR, STANDARD COST

Intermediate product	Units	Stand. min	Minutes total	% Minutes	Distr. Cost	Cost per unit
Product A	3000	60	180 000	50	300 000	100
Product B	1000	90	90 000	25	150 000	150
Product C	2000	45	90 000	25	150 000	75
	6000		360 000	100	600 000	

- Feeder system
- Clinic judgement

Transition



Transition

BLOOD BANK
January - June 1988
Budget report

	UNITS	TKR SEK
Budget	96529	13985
Actual	127658	15110
Difference	<u>31129</u>	<u>-1125</u>
%	32.2	-8.0

FLEXIBLE BUDGET

Budget	13985
Volume Adjustment	2897
Product Mix	<u>1271</u>
Flexible Budget	18153
Actual	15110
Flexible Variance	3143
%	+17.3

Transition

ANALYSIS OF VARIANCES

VARIABLE COST

Labor time	1987
Labor price	-200
Supply	347
Others	<u>0</u>

TOTAL VARIABLE COST 2134

FIXED COST

Physitions	-104
Other personnel	321
Equipment	59
Building	91
Others	<u>642</u>

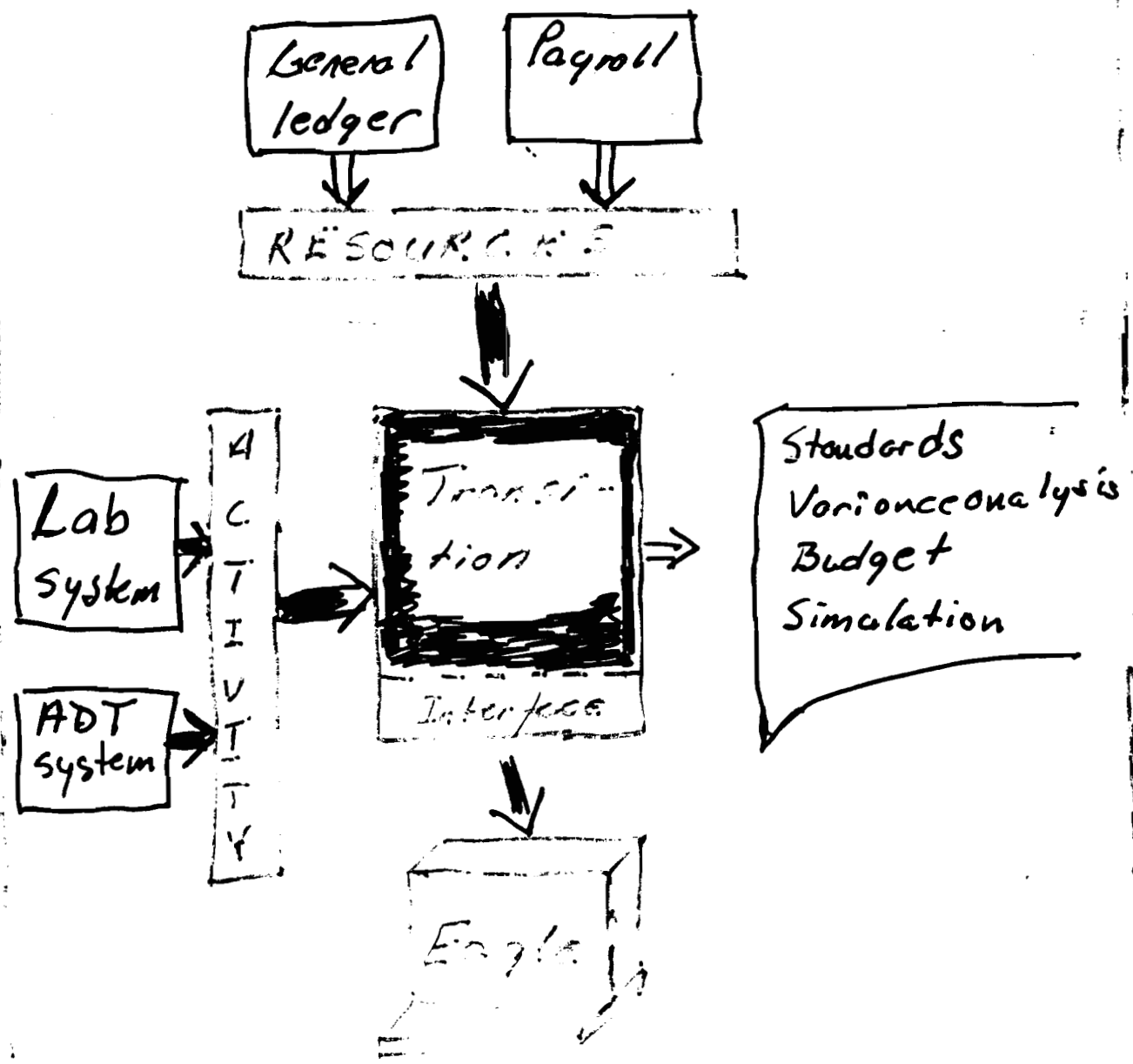
TOTAL FIXED COST 1009

FLEXIBLE VARIANCE 3143

NORRDATA

Transition

INFORMATION AND FEEDER SYSTEM



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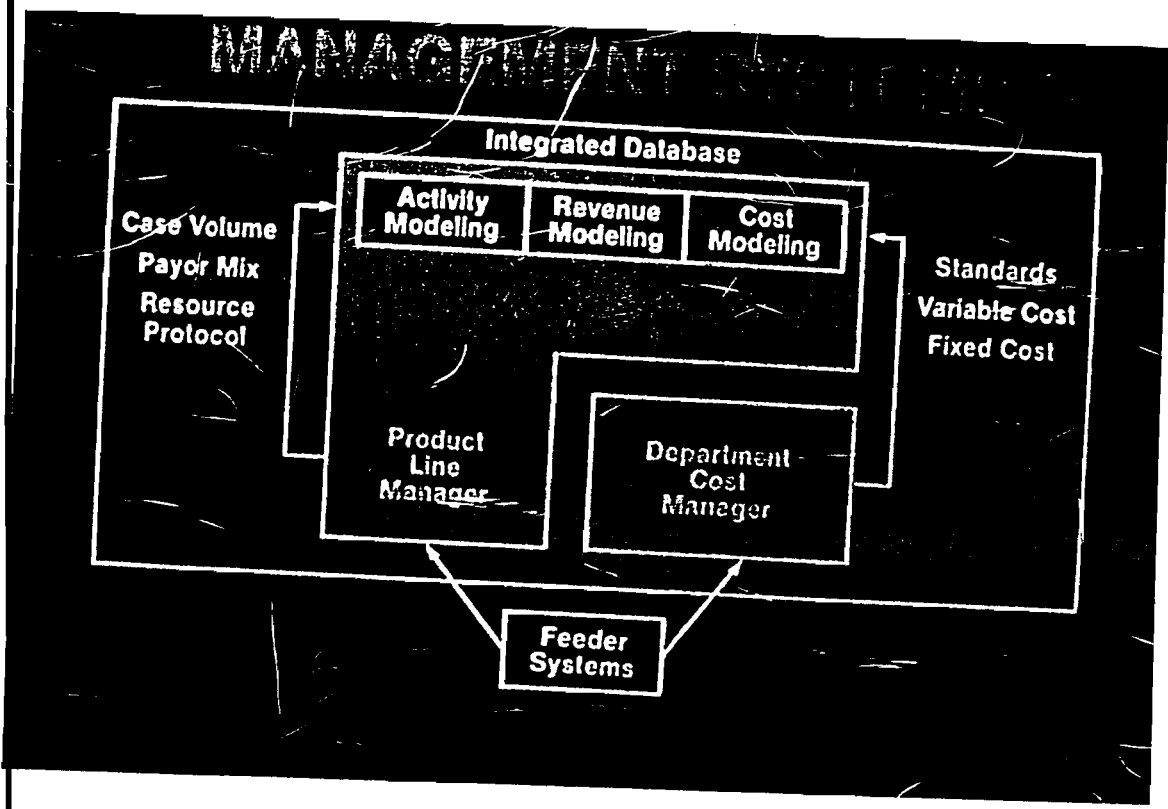
PRODUCT TYPES

- DRG's
- Surgical Procedures
- Programs i.e. oncology
- Episode of illness i.e. Leukemia
- MD (medical doctor) vs patient "product"

SIMULATION IN TS 1

ACTIVITY	COST	REVENUE
* Number of cases - DRG	* Labor cost	* Revenue
* Intermediate Products	* Inflation	- Payor
* Payor Mix	* Fixed Cost	- DRG
***		- 1009

Transition



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WHY CHANGE PHYSICIAN PRACTICE?

- Many studies show significant variation in medical decision making
- Reasons for variation are uncertain
- The financial impact of the variation is enormous
- Clinicians determined 80-90% of hospital resource use