

PERFECTION IS OUR GOAL, EXCELLENCE WILL BE TOLERATED

THE PASSIONATE PURSUIT OF EXCELLENCE

—LEXUS

PERFECTION MANAGEMENT

—MOTOROLA

**QUALITY, SPEED & RESULTS
CONTINUOUS IMPROVEMENT SYSTEMS & SOLUTIONS**



***CAN HOSPITAL
SERVICES MATCH
PRODUCTS IN THE
QUALITY GAME?***

***CAN WE BE A
“COMPELLING
EXAMPLE”?***

The History of the Pursuing Perfect Care Initiative
In April 2002, Cincinnati Children's received a \$1.9 million grant from the Robert Wood Johnson Foundation to participate in Pursuing Perfection: Raising the Bar for Health-Care Performance. Cincinnati Children's was one of seven health care organizations, and the only pediatric center, to receive this honor. This project was initiated with the extraordinary goal of transforming the health care system in America. Pursuing Perfection is a response to two reports from the Institute of Medicine that questioned the safety, quality, efficiency, effectiveness and fairness of the nation's health care system. *Pursuing Perfection was intended to be a catalyst for rapid, transformational change. Participants are expected to produce compelling examples of how health care organizations can significantly improve.*

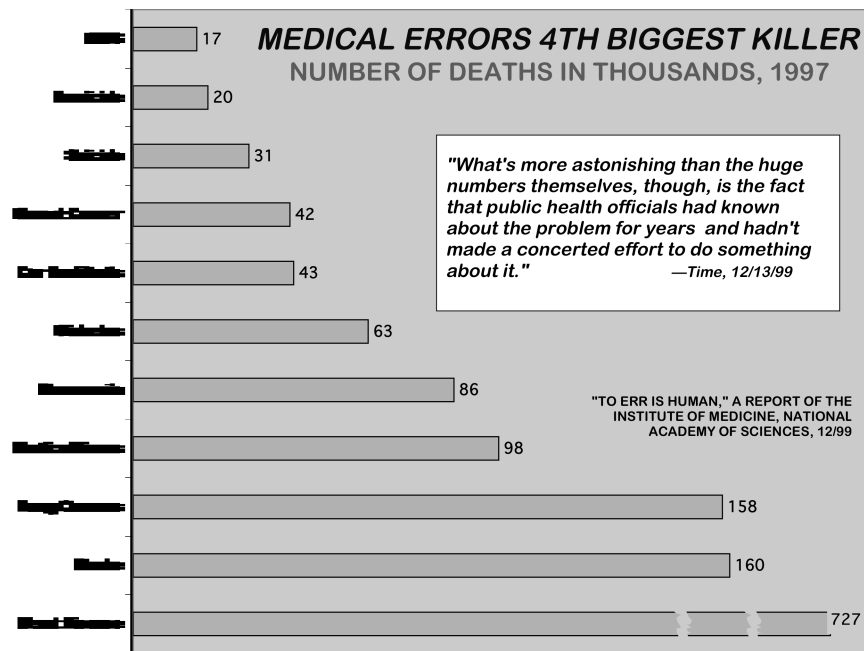
ARE WE REALLY THE BEST HEALTH CARE SYSTEM?

Rank	Country	Per capita spending
1	France	\$2,125
2	Italy	1,824
3	San Marino	1,301
4	Andorra	1,216
5	Malta	755
6	Singapore	750
7	Spain	1,211
8	Oman	334
9	Austria	1,960
10	Japan	1,759
11	Norway	1,700
12	Portugal	
13	Monaco	
14	Greece	
15	Iceland	1,757
16	Luxembourg	1,985
17	Netherlands	1,911
18	United Kingdom	1,193
19	Ireland	1,200
20	Switzerland	2,644

"MEDICAL ERRORS KILL 98,000" —Times



"HOSPITAL CHAIN EXECS BLK STATE FOR MILLIONS" —Newsweek



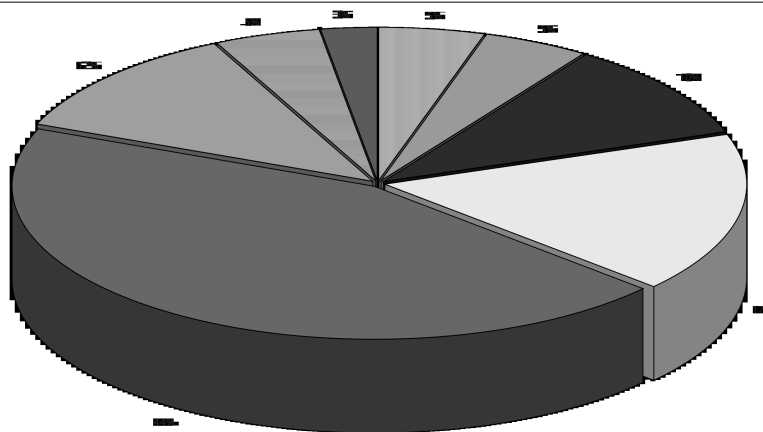
THE LIONESS SPEAKS

IT HAS TO BE RECOGNIZED THAT ORGANIZATIONS ROUTINELY COMMIT BLUNDERS FOR WANT OF KNOWLEDGE. GOOD INTENTIONS ARE ENOUGH, IT SEEMS TO BE THOUGHT. YET BLUNDERS, *ORGANIZED BLUNDERS*, DO MORE MISCHIEF THAN CRIMES. CARELESSNESS, INDIFFERENCE, WANT OF THOUGHT, WHEN IT IS *ORGANIZED INDIFFERENCE*, AS IN A FAMILY, AS IN A COLLEGE, AS IN AN INSTITUTION, (AS IN A HOSPITAL OR ARMY), AS IN A GREAT GOVERNMENT OFFICE, *ORGANIZED CARELESSNESS* IS FAR MORE HURTFUL THAN EVEN ACTUAL SIN, AS WE MAY HAVE OCCASION EVERY DAY TO FIND OUT.



—Florence Nightingale
Letter To Benjamin Jowett, Master Of Balliol College, August 8, 1871

4% OF PATIENTS INJURED BY TREATMENT



100,000 DEATHS/YEAR

1.3 MILLION INJURIES/YEAR



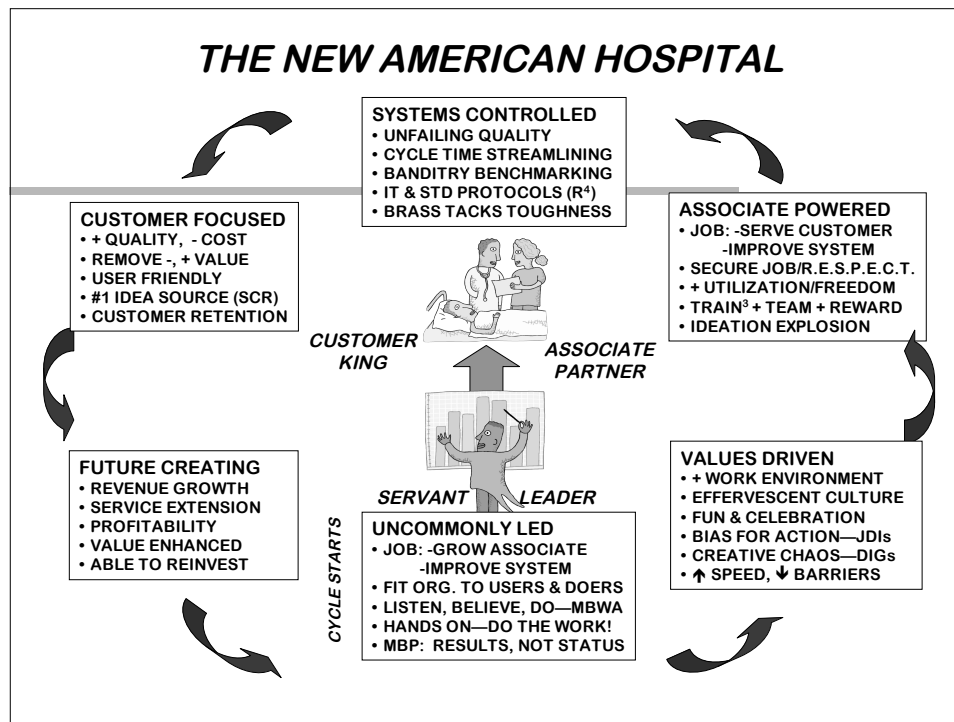
EXPECTED ERROR RATES WHEN IS GOOD, GOOD ENOUGH?



1. EER (NORMAL MISTAKES) = 6/1000
2. HOSPITALS' ERROR RATE = 40/1000 (4% OF ADMISSIONS)
 - 100,000 DEATHS AND 1,300,000 INJURIES
 - 100,000/350 SEATS = 285 BOEING 747 CRASHES/YR, 5+/WK
3. "NORMAL" EER FOR HOSPITALS WOULD BE:

$$UCL/LCL = X \pm 3\sqrt{X} = 6 \pm 3\sqrt{6} = 0 \text{ TO } 13.35/1000$$

\therefore SYSTEM IS "OUT OF CONTROL"
4. ZERO DEFECTS = 0/1000
5. MOTOROLA DEFECTS (SIX SIGMA) = .0034/1000
 OR 3.4/1,000,000 — (99.9999998% DEFECT FREE)



PART A

THE WHAT & WHY OF ADVANCED PROBLEM SOLVING

QUALITY DEFINITIONS

"I know it when I see it!"

CUSTOMER SATISFACTION

- PERFORMANCE: DOES IT PRODUCE, GIVE RIGHT RESULTS?
- FEATURES: DOES IT PROVIDE EXTRAS?
- CONFORMANCE: MEET STANDARDS, EXPECTATIONS?
- SERVICEABILITY: SPEED, COURTESY, EASE OF USE?
- AESTHETICS: CLEAN, LOOK, IMPACT ON SENSES?
- PERCEIVED QUALITY: REPUTATION, IMAGE OF QUALITY?
- RELIABILITY:* CAN I COUNT ON IT TO WORK, NOT FAIL?
- DURABILITY:* HOW LONG WILL IT WORK?

STANDARDS OF PERFORMANCE

- WORLD CLASS, BENCHMARK, BEST ORGANIZATIONS
- JCAHO CLINICAL OUTCOMES
- NEW STANDARDS GROUPS

CONTINUOUS IMPROVEMENT

- NO UPPER LIMITS!
- ON KRAs: FASTER, BETTER, CHEAPER, MORE!

QUALITY STRATEGIES

Fig 1.2
Pg 1-3

LEVELS

1. ACCEPTABLE QUALITY LEVEL —MINIMUM NUMBER/PERFORMANCE NEEDED TO MEET QUALITY STANDARDS, "GOOD ENOUGH"
2. COMPETITIVE BENCHMARKING —RATE ORGANIZATION'S PRACTICES & SERVICES AGAINST WORLD'S BEST & ACHIEVE SAME LEVEL
3. BREAKTHROUGH BENCHMARKING —MATCH BENCHMARK, THEN EXCEED BY % GOAL IN SET TIME. USE *ADDITIVE PROCESS* FOR IMPRESSIVE RESULTS

PRACTICES

1. CUSTOMER IS QUALITY BOSS, GUIDED BY STRATEGIC PLAN
 - THEIR AGENDA FIRST, THEN OURS → *ZERO DEFLECTIONS*.
 - *QUALITY FUNCTION DEPLOYMENT*—ACTIVITY NON CONTRIBUTIVE TO CUSTOMER WANTS IS WASTED
 - ADD VALUE AT EACH STEP THAT IS AFFORDABLE, REIMBURSABLE
2. KRA CONTINUOUS IMPROVEMENT —SEARCH CEASELESSLY FOR HIGHER QUALITY BY ISOLATING DEFECT SOURCES, GO FOR *ZERO DEFECTS* ON WORK THAT MATTERS. MANY BRAINS & GROUP PROCESSES USING CI POWER TOOLS
3. CYCLE TIME REDUCTION —DRAINS THE SWAMP & EXPOSES PROBLEMS
 - *JUST IN TIME*—CONTROLLING UPSTREAM, SUPPLIERS DELIVER MATERIALS & SERVICES AT MOMENT NEEDED—ELIMINATE INVENTORIES, COST, TIME, EFFORT
 - QUALITY IS SUPPLIER RESPONSIBILITY—FAULTY MATERIAL UNDETECTED
4. DESIGN IN QUALITY —PREVENT ANTICIPATED ERRORS
 - *POKA-YOKE*—MISTAKE PROOF WORK SO IT CAN BE DONE ONLY ONE WAY
 - *ROBUST DESIGN*—BUILD IN TOLERANCES FOR UNAVOIDABLE VARIABLES

Fig 2.1
Pg 2-2

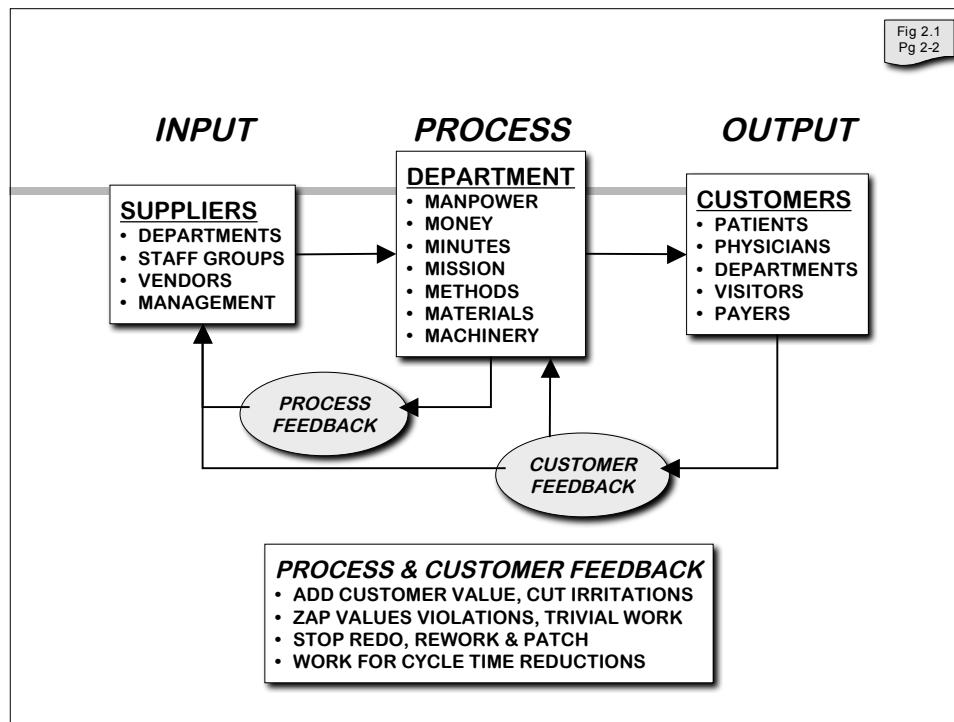
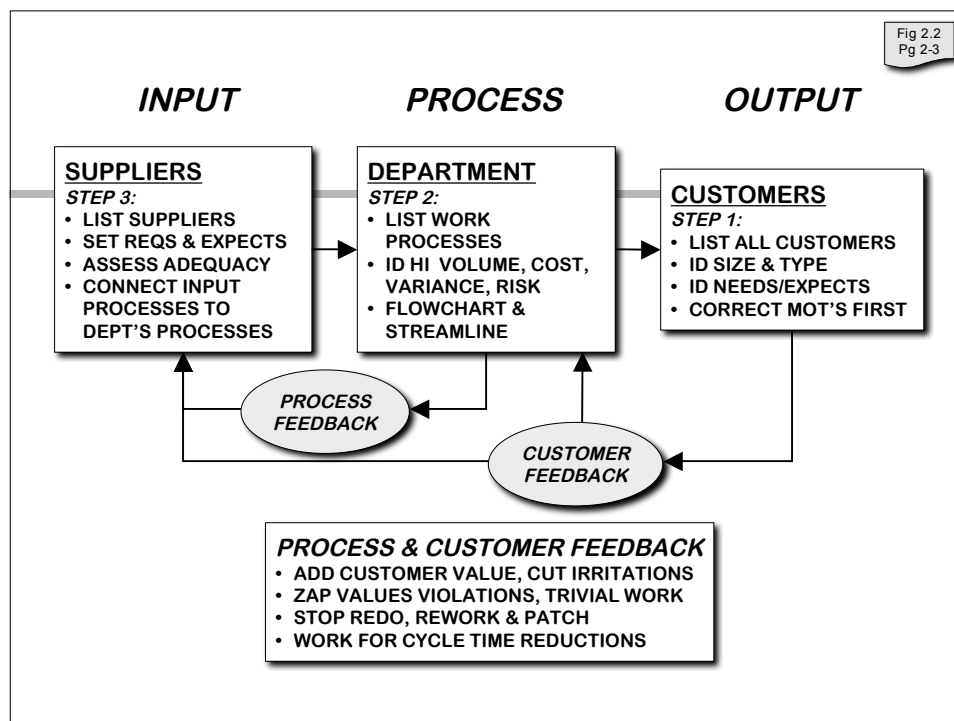


Fig 2.2
Pg 2-3





NMH CHAIN OF INTERACTIONS

EVERY TOUCH & HANDOFF CREATES RISKS

CI Rx:

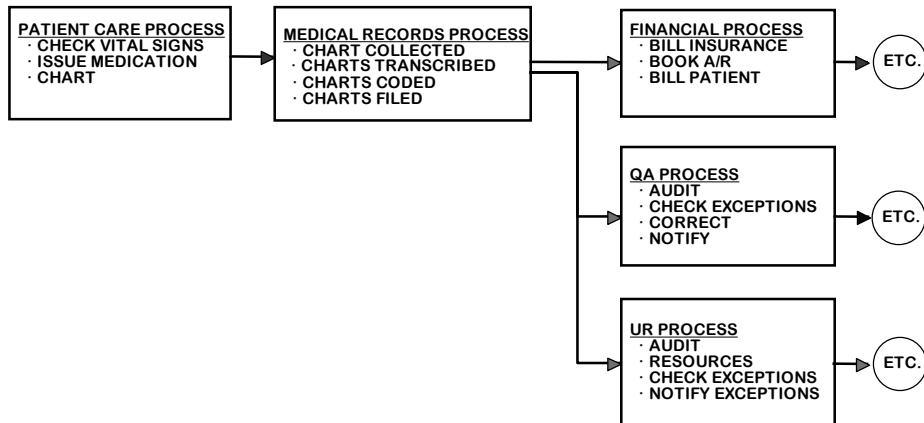
- REDUCE NUMBER OF TOUCHES
- INCREASE TRAINING/CAPABILITIES
- AUTOMATE WHEREVER POSSIBLE

***DON'T LET YOUR UNIT BE
THE WEAK LINK IN THE CHAIN!***



Fig 2.3
Pg 2-5

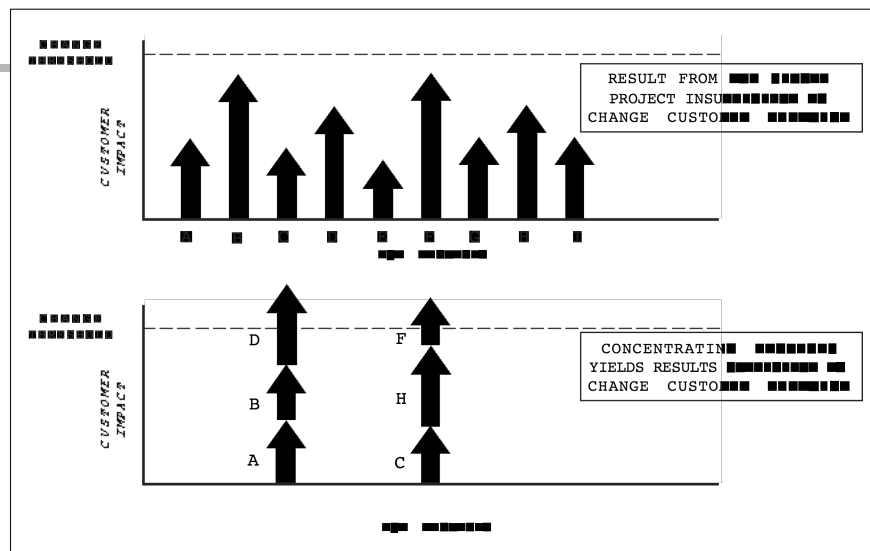
SYSTEM = MANY PROCESSES



STEPS TO PROCESS IMPROVEMENT

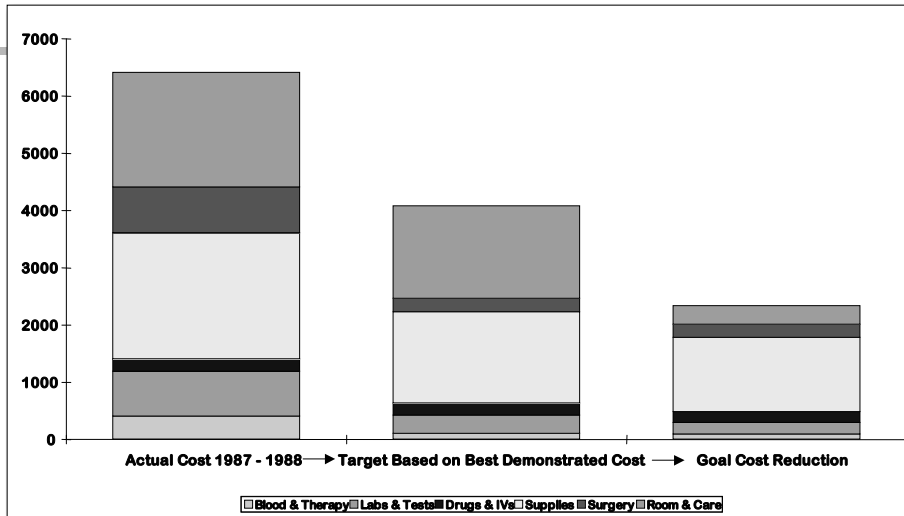
1. DEFINE OUTPUT REQUIREMENTS —CUSTOMER 1ST!
2. DEFINE INPUT REQUIREMENTS WITH SUPPLIERS
3. DEFINE UNIT VALUE ADDED PROCESS CHANGES
4. FLOWCHART CURRENT ACTIVITIES/STEPS
5. ANALYZE VARIANCE & DESIGN SOLUTIONS
 - QUALITY FUNCTION DEPLOYMENT STREAMLINING
 - ANALYZE CYCLE TIMES TO REDUCE WASTE (REWORK, EFFORT, SPACE, TRANSPORTATION, MATERIALS)
6. CONFORM TO VALUES, SOPs & PRINCIPLES
7. DESIGN & IMPLEMENT NEW PROCESS
8. CONTINUOUSLY IMPROVE, IF SENSIBLE

WHAT'S BETTER? A THOUSAND SINGLES, OR A FEW HOME RUNS?

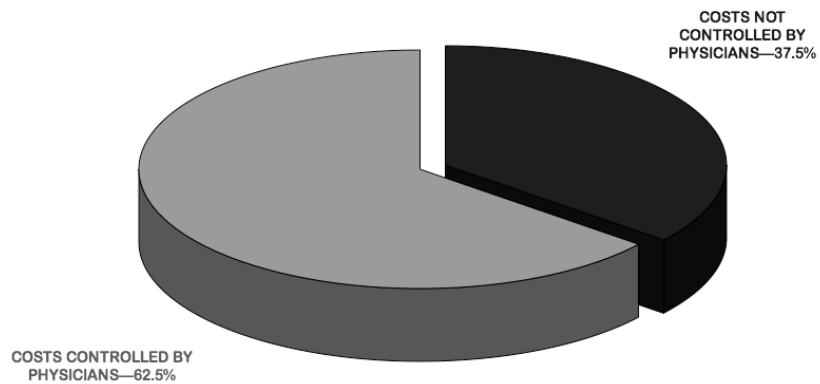


—Healthcare Advisory Board, TQM: The Second Generation

ADDITIVE PROCESS TOTAL HIP REPLACEMENTS



PHYSICIAN COOPERATION ESSENTIAL MAJORITY OF COSTS THROUGH SERVICES ORDERED



—KAISER PERMANENTE MEDICAL CARE PROGRAM, 2004 ANNUAL REPORT

NMH PRESENTATION

COMPARATIVE PHYSICIAN EXPENSES FOR SAME PROCEDURE



HOW TO INTEGRATE MDs IN CI

1. IDENTIFY PROCESS TO BE IMPROVED
2. ASK FOR MD INVOLVEMENT & SUPPORT— REGARDLESS
3. CREATE THE NEW PROCESS
4. PRESENT IMPROVED PROCESS DATA
5. GET ADMINISTRATIVE APPROVAL
6. USE PEER MD PRESSURE FOR COMPLIANCE
7. USE EXECUTIVE PRESSURE FOR COMPLIANCE

WHY WE HESITATE TO INVOLVE MDs

1. NO SYSTEM, NO TOOLS, NO ACCESS
2. FEAR OF FAILURE
3. FEAR OF ANGERING MDs
4. FEAR OF REJECTION
5. FEAR OF BURDENING BIGGEST CUSTOMER

PART B

THE CRAFTSMAN'S TOOLKIT

SIX SIGMA AND QUALITY METHODOLOGIES

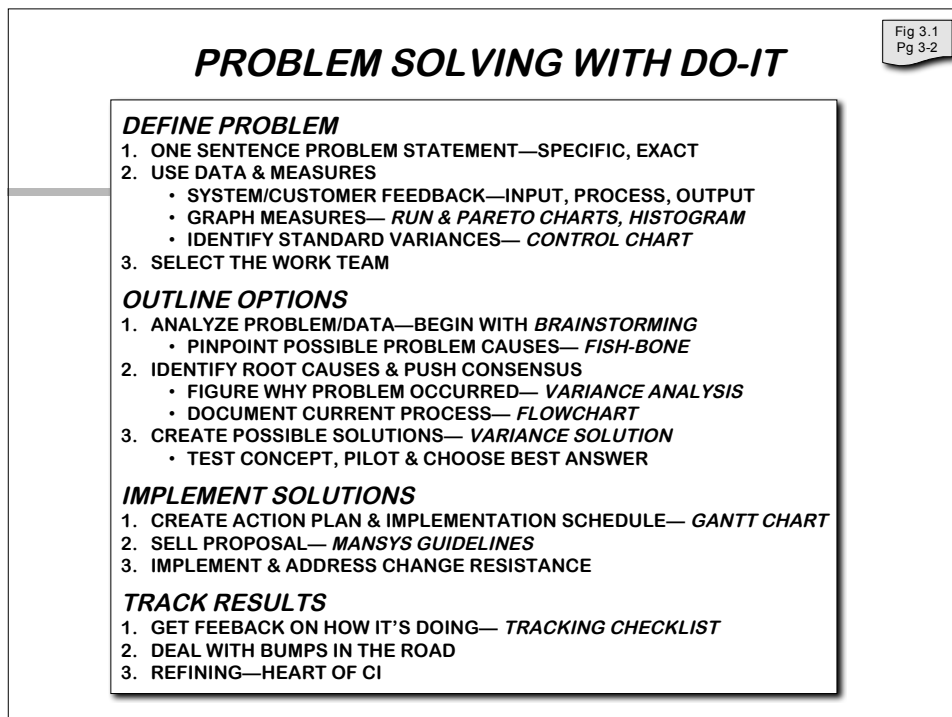
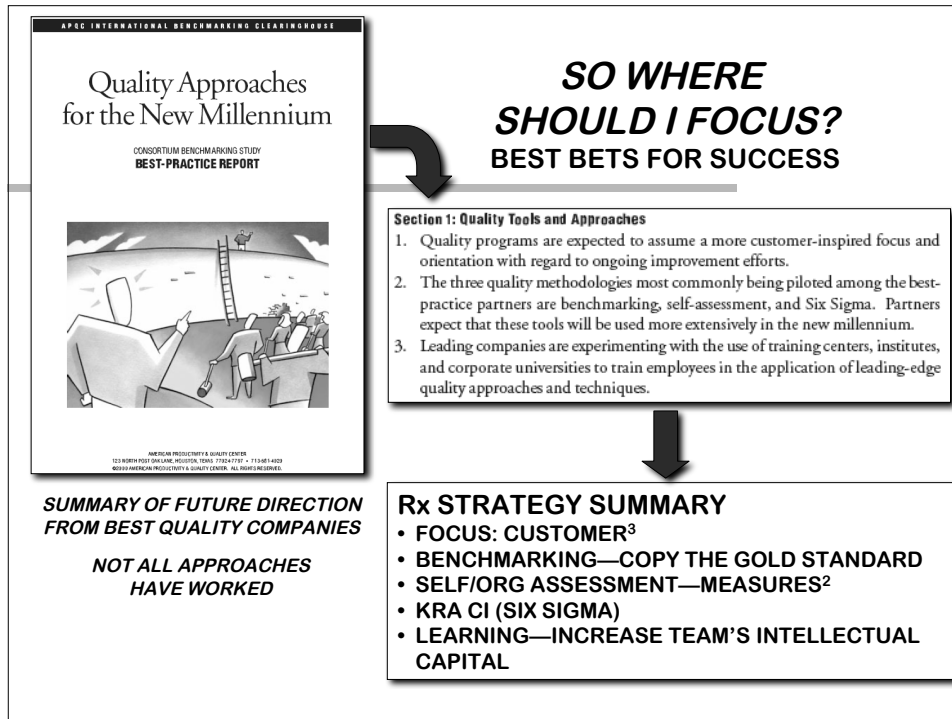
DON'T GET SNOWED BY THE TERMINOLOGY EXPLOSION!



- ABC - ACTIVITY BASED COST ACCOUNTING
- ALPHA RISK, TYPE 1 ERROR
- AFFINITY DIAGRAMMING
- ANALYTICAL MODELING
- BALANCED SCORECARD
- BALDRIDGE
- BENCHMARKING
- BUSINESS PROCESS REENGINEERING (BPR)
- CAD/CAM
- CONCEPT ENGINEERING
- DEMING
- DOCUMENT CONTROL
- DMADV / NEW PRODUCT & SERVICE INTRODUCTION
- DMAIC / EXISTING PRODUCT OR SERVICE

- FINANCIAL ANALYSIS / COST OF QUALITY
- ISO 900
- LEAN, LEAN SIX SIGMA & LEAN MANUFACTURING MANAGEMENT
- METRICS
- PLAN, DO, CHECK, ACT - PDCA (DO-IT)
- PROCESS MANAGEMENT
- PROJECT SELECTION
- SIMULATION
- SIX SIGMA
- TAGUCHI METHODS
- TL 9000
- TOTAL QUALITY MANAGEMENT (TQM)
- TRIZ, THEORY OF INVENTIVE PROBLEM SOLVING
- WORK-OUTSOLVING
- WORK-OUT

BE AN EFFECTIVE ECLECTIC!



WHERE & WHEN TO USE TOOLS													
	DEFINE PROBLEM			OUTLINE OPTIONS			IMPLEMENT SOLUTIONS			TRACK RESULTS			
	STATEMENT OF THE PROBLEM	MEASURES OF THE PROBLEM	FEEDBACK OF THE PROBLEM	GRAPH MEASURES OF THE PROBLEM	IDENTIFY VARIANCES OF THE PROBLEM	STATEMENT OF THE SOLUTION	MEASURES OF THE SOLUTION	FEEDBACK OF THE SOLUTION	GRAPH MEASURES OF THE SOLUTION	IDENTIFY VARIANCES OF THE SOLUTION	STATEMENT OF THE RESULTS	MEASURES OF THE RESULTS	
CORE TOOLS													
STATEMENT OF THE PROBLEM	I												I—S
MEASURES OF THE PROBLEM		I											MS—S
FEEDBACK OF THE PROBLEM			I										MS—S
GRAPH MEASURES OF THE PROBLEM				I									MS—S
IDENTIFY VARIANCES OF THE PROBLEM					I								MS—S
STATEMENT OF THE SOLUTION						I							I—S
MEASURES OF THE SOLUTION							I						MS—S
FEEDBACK OF THE SOLUTION								I					MS—S
GRAPH MEASURES OF THE SOLUTION									I				MS—S
IDENTIFY VARIANCES OF THE SOLUTION										I			MS—S
STATEMENT OF THE RESULTS											I		I—S
MEASURES OF THE RESULTS												I	MS—S
FEEDBACK OF THE RESULTS													MS—S
GRAPH MEASURES OF THE RESULTS													MS—S
IDENTIFY VARIANCES OF THE RESULTS													MS—S
SPECIAL USE TOOLS													
STATEMENT OF THE PROBLEM	I												I—S
MEASURES OF THE PROBLEM		I											MS—S
FEEDBACK OF THE PROBLEM			I										MS—S
GRAPH MEASURES OF THE PROBLEM				I									MS—S
IDENTIFY VARIANCES OF THE PROBLEM					I								MS—S
STATEMENT OF THE SOLUTION						I							I—S
MEASURES OF THE SOLUTION							I						MS—S
FEEDBACK OF THE SOLUTION								I					MS—S
GRAPH MEASURES OF THE SOLUTION									I				MS—S
IDENTIFY VARIANCES OF THE SOLUTION										I			MS—S
STATEMENT OF THE RESULTS											I		I—S
MEASURES OF THE RESULTS												I	MS—S
FEEDBACK OF THE RESULTS													MS—S
GRAPH MEASURES OF THE RESULTS													MS—S
IDENTIFY VARIANCES OF THE RESULTS													MS—S

I = Primary Application; S = Secondary Use; N = None.

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I = Strong Application; S = Secondary Role; MS = Moderate.

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STEP 1—DEFINE PROBLEM

1. ONE SENTENCE STATEMENT—SPECIFIC, EXACT

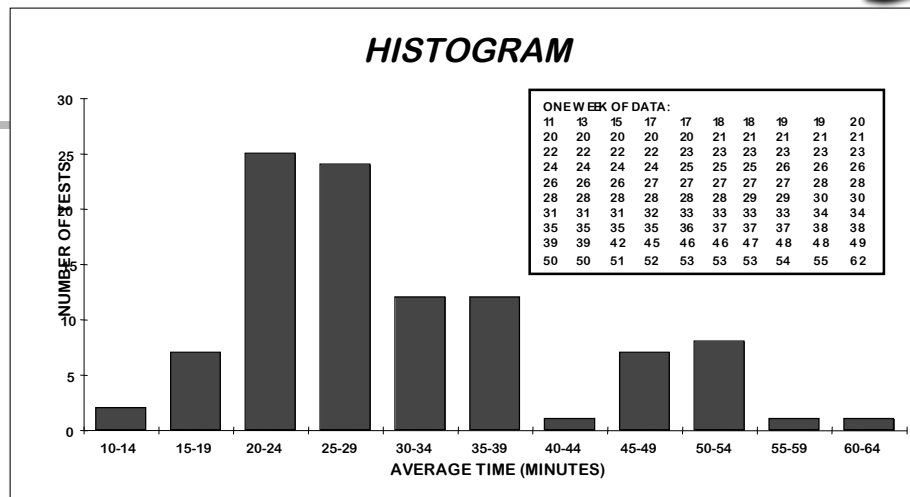
2. USE DATA & MEASURES

- SYSTEM/CUSTOMER FEEDBACK— *INPUT, PROCESS, OUTPUT*
- GRAPH MEASURES— *RUN & PARETO CHARTS, HISTOGRAM*
- IDENTIFY VARIANCES— *BENCHMARKING, CONTROL CHART*

3. SELECT THE WORK TEAM

SPECIAL USE TOOLS

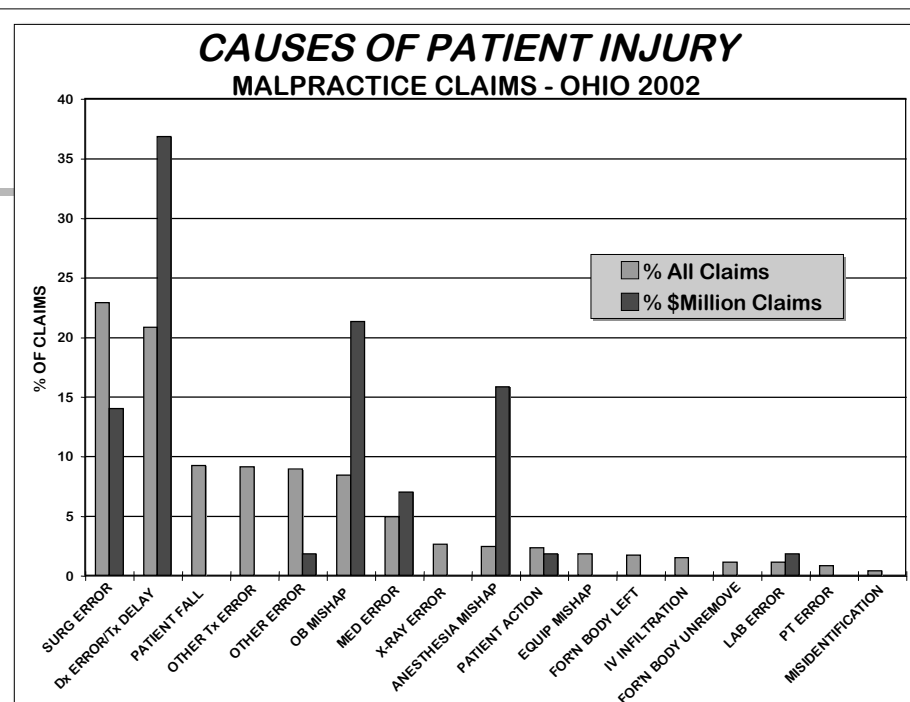
- FOCUS GROUPS & INTERVIEWS
- SAMPLING & SURVEYS
- DATA STRATIFICATION

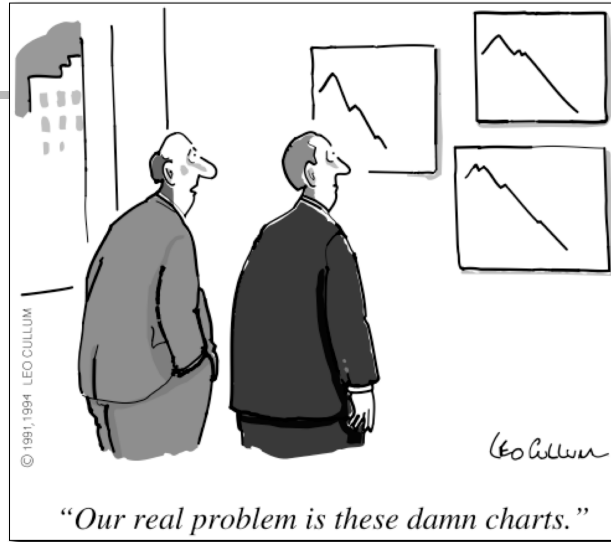


HISTOGRAMS ALLOW ANALYSIS OF DATA PATTERNS

EXAMPLE: LAB MINUTES FROM ORDER TO RESULTS DELIVERED

- HIGH VARIATION: 10 MINUTES - 1 HOUR
- MAJORITY IN 20 - 30 MINUTES
- FEW < 20 MINUTES, MANY > 30 MINUTES





**FACTS
ARE
YOUR
FRIENDS
!**

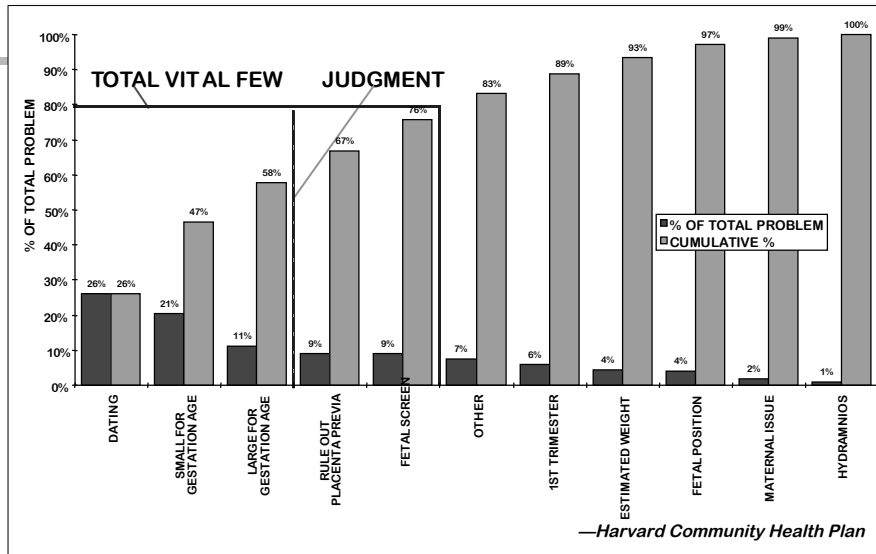
PARETO PRINCIPLE

A FEW ITEMS, THE VITAL FEW, PRODUCE MOST RESULTS, GOOD OR BAD—THE 80-20 RULE

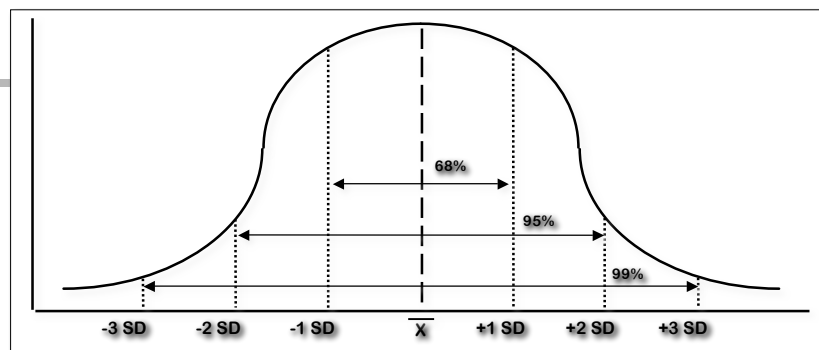
PARETO CHART

1. COLLECT DATA ABOUT THE PROBLEM
2. DISPLAY DATA LARGEST TO SMALLEST
3. CUT DATA WHERE SLOPE OF LINE FALLS OFF
4. ANALYZE LARGEST PROBLEM CONTRIBUTORS

PARETO DIAGRAM MATERNITY ULTRASOUNDS ORDERED

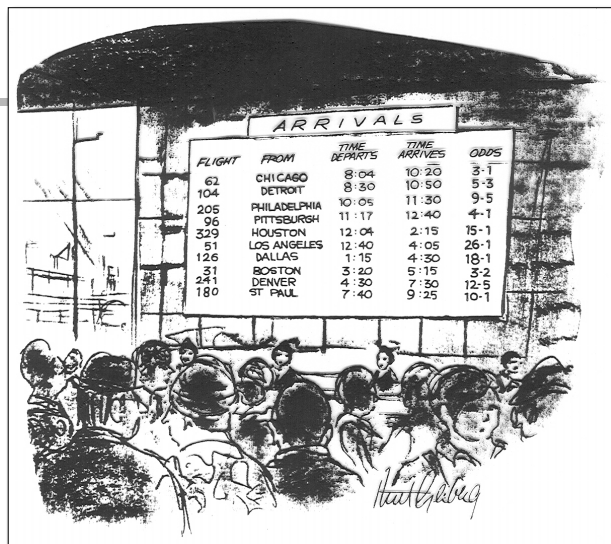
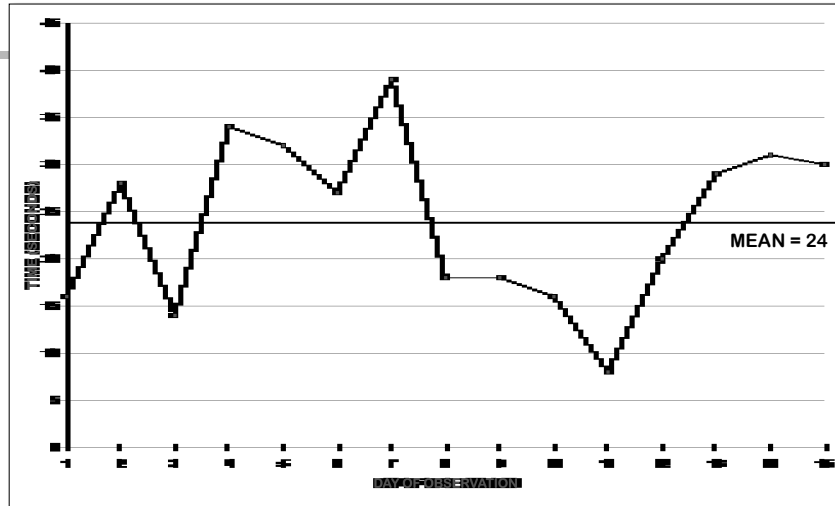


PREDICTING PROBLEMS “VARIANCE IS BAD” WHEN NOT “CLOSE ENOUGH FOR JAZZ”



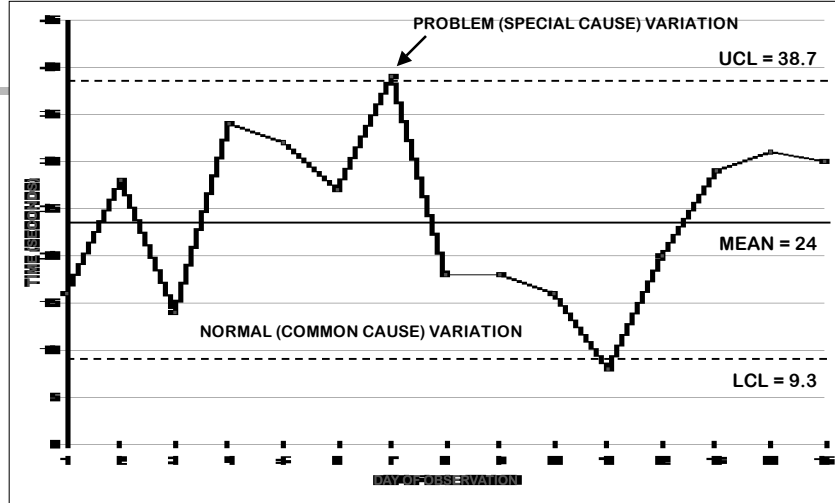
1. NEARLY ALL EVENTS SHOW A NORMAL DISTRIBUTION WITH MOST VARIANCE NEAR THE MEAN, & DECLINING AWAY FROM THE MEAN
2. VARIANCE CAN BE EXPRESSED AS STANDARD DEVIATION, WHERE: $SD = \sqrt{X}$ (A CALCULATED DISTANCE FROM THE MEAN)
3. THE AMOUNT OF VARIANCE UNDER THE CURVE IS DEPENDABLY:
 - BETWEEN ± 1 SD = 68.26%
 - BETWEEN ± 2 SD = 95.44%
 - BETWEEN ± 3 SD = 99.72%
4. HENCE, WE CAN “PREDICT WITH CONFIDENCE”, STATE WITH A HIGH DEGREE OF CERTAINTY, THAT ANY DATA POINT OUTSIDE THIS RANGE IS UNLIKELY
5. CONTROL LIMITS ARE USUALLY SET AT 2 OR 3 SD ABOVE & BELOW THE MEAN

RUN CHART



CONTROL CHART

TIME RECEPTIONIST TAKES TO ANSWER PHONE 10:00 - 11:30



USE TO DETERMINE IF PROCESS IS STABLE:

1. PLOT ACTUAL PERFORMANCE = RUN CHART
2. CALCULATE AVERAGE PERFORMANCE & UCL/LCL
3. ID & FIX PROBLEM VARIATION
4. IMPROVE PROCESS—REDUCE NORMAL VARIATION/IMPROVE AVERAGE

PROCESS CONTROL CHART

SHOWS STABILITY & PREDICTABILITY OF PROCESS

- PURPOSE: DECIDE TO ACT OR LEAVE THINGS ALONE—ID'S WHEN UNNATURAL PATTERNS OCCUR
- COMPARES TO PAST & BENCHMARK PERFORMANCE
- STABILITY NOT ALWAYS = QUALITY: STABLE BELOW STANDARDS UNACCEPTABLE

TYPE OF VARIATION YIELDS CAUSE PREDICTION

- NORMAL: WITHIN PROCESS, CONTINUOUS IMPROVEMENT
- PROBLEM: OUTSIDE PROCESS, ALLOW STAFF TO STOP

COMMON ERROR IS TAMPERING

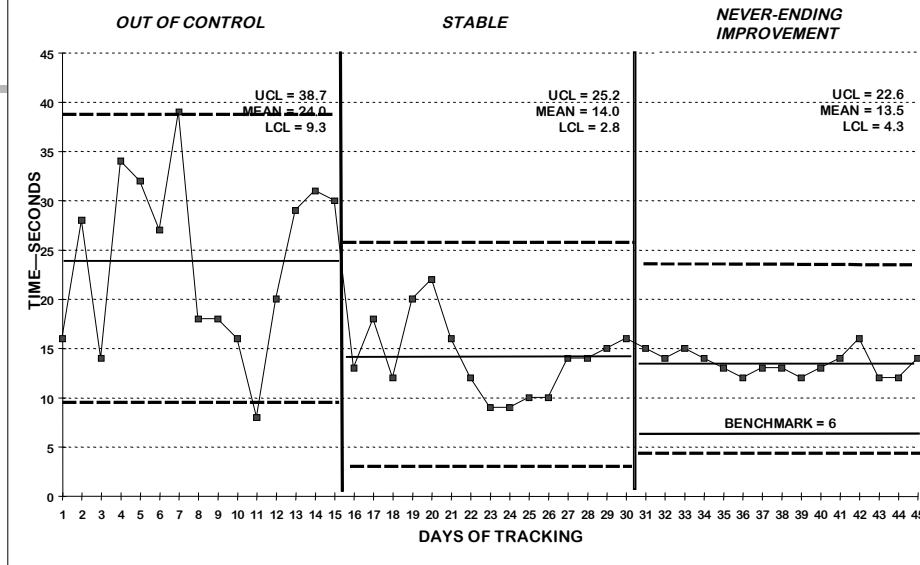
- TREAT "SPECIAL CAUSE" (PROBLEM) AS "COMMON CAUSE" (NORMAL) & VICE VERSA
- POOR RESULTS: COSTS, TIME, PRODUCTIVITY, MORALE

GOALS

- ELIMINATE PROBLEM VARIATION CAUSES
- REDUCE NORMAL VARIATION
- ADJUST UCL/LCL & MEAN TOWARD CUSTOMER STANDARDS

CONTROL CHART

Fig 5.8
Pg 5-19



HOW TO BUILD A CONTROL CHART

Fig 5.9
Pg 5-18

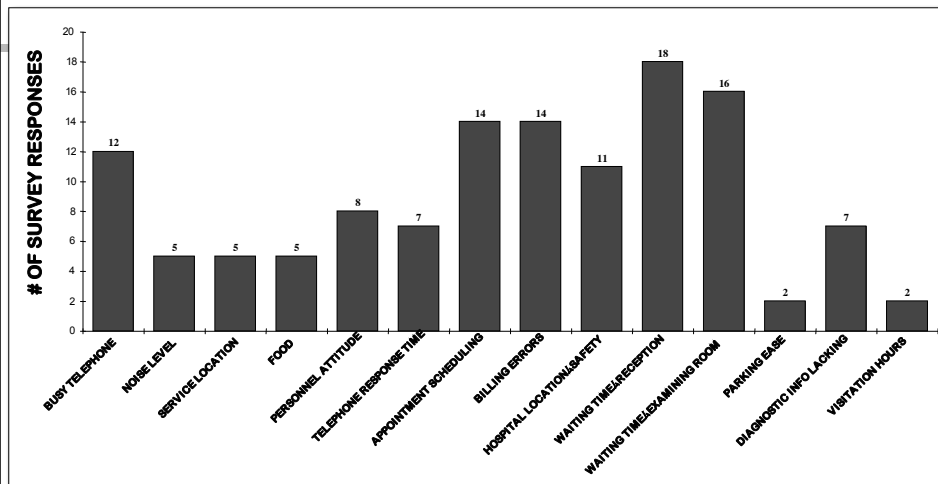
1. DETERMINE MEASUREMENT UNITS
2. DETERMINE TIME FRAME FOR MULTIPLE CYCLES
3. CALCULATE MEAN (AVERAGE) PERFORMANCE MEASUREMENT
4. CALCULATE UPPER & LOWER CONTROL LIMITS
5. PLOT ACTUAL MEASUREMENTS OVER TIME
6. ISOLATE ALL POINTS ABOVE UCL AND DETERMINE CAUSE. THESE ARE "SPECIAL CAUSE" (PROBLEM) VARIATIONS
7. REVIEW "COMMON CAUSE" (NORMAL) VARIANCE. IS IT DESIRABLE TO REDUCE CONTROL LIMITS FURTHER?
8. MAKE CHANGES TO PROCESS
9. MONITOR AGAIN—WERE IMPROVEMENTS MADE?

HOPE SPRINGS ETERNAL—PART A

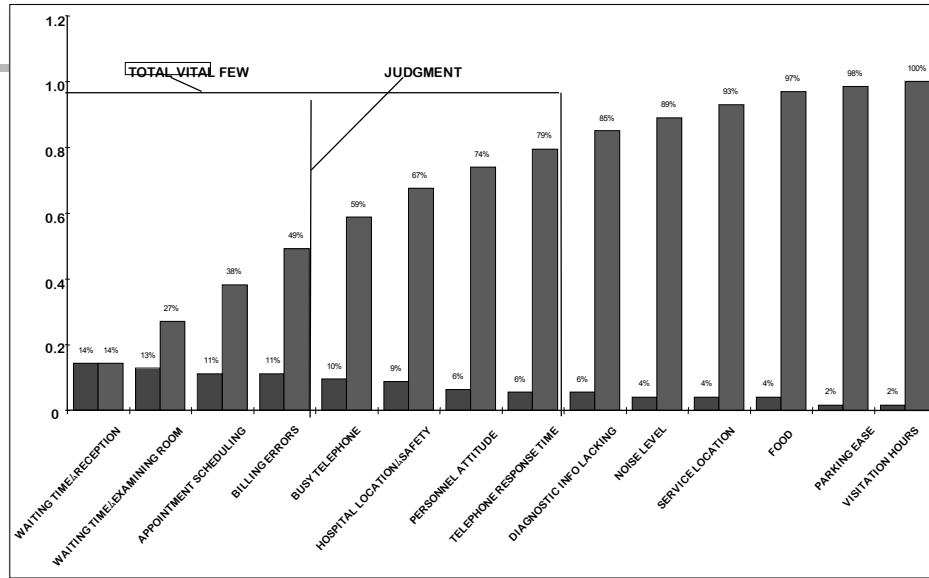
QUICKLY FORM GROUPS OF 4.
YOU HAVE ONLY 20 MINUTES TO CREATE A:

- HISTOGRAM
- PARETO CHART
- RUN CHART
- CONTROL CHART

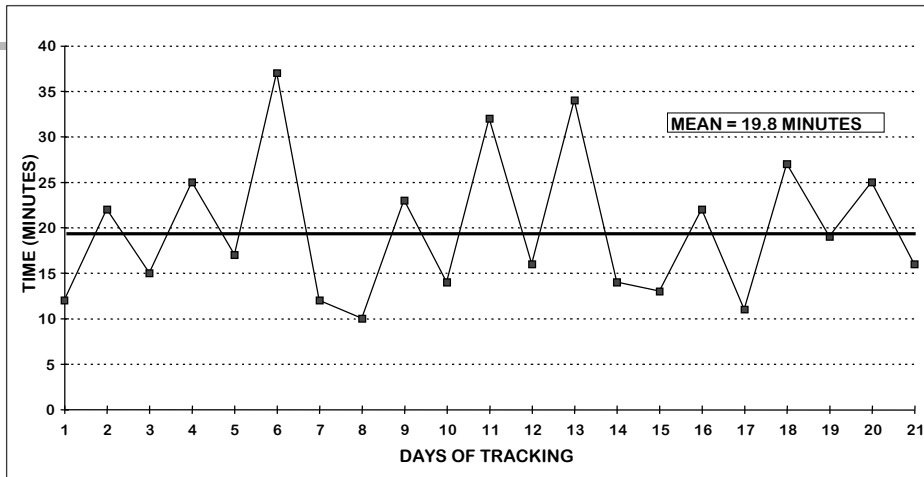
CASE: HISTOGRAM **REASONS FOR PATIENT DISSATISFACTION**



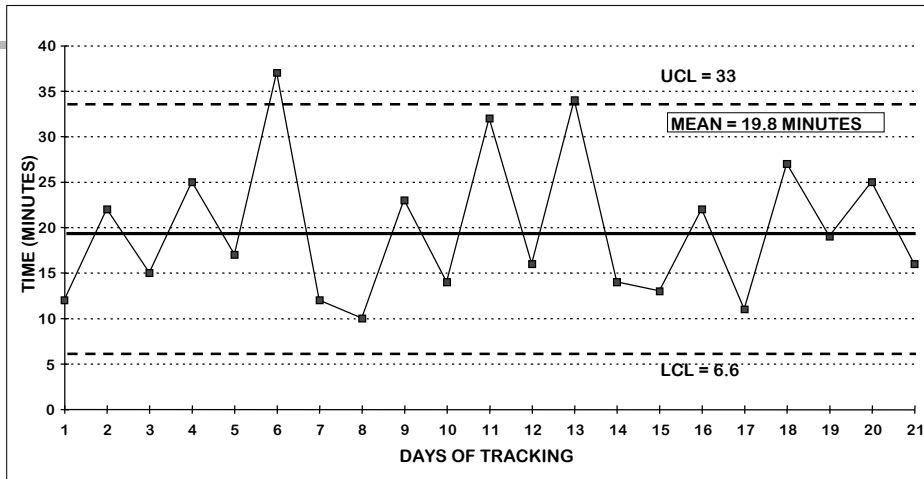
CASE PARETO CHART PATIENT DISSATISFACTION



CASE: RUN CHART PATIENT WAITING TIME



CASE: CONTROL CHART PATIENT WAITING TIME



STEP 2—OUTLINE OPTIONS

Fig 6.1
Pg 6-1

1. ANALYZE PROBLEM DATA

- BEGIN WITH *BRAINSTORMING*
- PINPOINT POSSIBLE PROBLEM CAUSES— *FISH-BONE*

2. IDENTIFY ROOT CAUSES—PUSH CONSENSUS

- FIGURE OUT WHY PROBLEM OCCURRED— *VARIANCE ANALYSIS*
- DOCUMENT CURRENT PROCESS— *FLOWCHART, WORK TRAFFIC DIAGRAM*

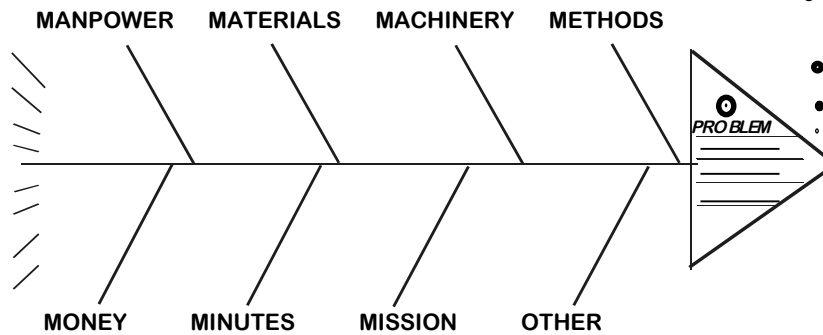
3. CONSIDER POSSIBLE SOLUTIONS & CONTROLS

- GENERATE ALTERNATIVES— *VARIANCE SOLUTION*
- TEST CONCEPT: CHART, PILOT, CUSTOMER RESPONSE
- CHOOSE BEST ALTERNATIVE— *DECISION MATRIX, COST/BENEFIT ANALYSIS*

SPECIAL USE TOOLS

- WORK SIMPLIFICATION
- VARIANCE ANALYSIS/SOLUTION
- CYCLE TIME ANALYSIS
- STRATIFICATION

FISH BONE CHART (CAUSE & EFFECT CHART)



USED TO ID CAUSES:
 1. WRITE PROBLEM STATEMENT
 2. LIST SOURCES OF PROBLEM
 3. ID SPECIFIC POSSIBLE CAUSES
 4. ID 1 OR 2 MOST LIKELY CAUSES

TYPICAL SYSTEM ERRORS

MANPOWER

- EXCESS LAYERS & BUREAUCRACY
- LACK EMPOWERMENT & TRAINING
- RIGID JOB STRUCTURES
- NO JIT STAFFING
- STAFF UNDERUTILIZATION

MACHINERY

- INFERIOR QUALITY
- DOWNTIME
- TOOL DEFICIENCY
- OUTPUT MISMATCH
- WRONG LOCATION

MINUTES

- BOTTLENECKS
- MISSING INFORMATION
- INCOMPATIBLE FORMATS
- DUPLICATE PAPERWORK
- STAFF-TIME UNDERUTILIZATION

MISSION

- DEADEND ASSIGNMENTS
- NO DIRECTION, AMBIGUOUS
- NO SUPPORT

MATERIALS

- INFERIOR QUALITY
- NO JIT—MORE LABOR, COST
- INCONVENIENT LOCATION

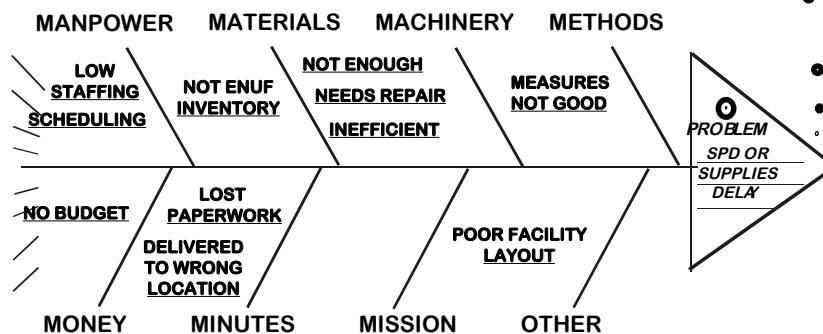
METHODS

- VARIABLE OR UNSTABLE
- DON'T UNDERSTAND OUTPUT NEEDS
- NO DATA, POOR MEASURES
- NOT USING ANALYTICAL TOOLS

MONEY

- WORK DUPLICATION, WASTE
- REGULATIONS & POLITICS
- LOW SPENDING AUTHORITIES

FISH BONE CHART (CAUSE & EFFECT CHART)



VARIANCE ANALYSIS WORKSHEET							
SPECIFY THE PROBLEM				ANALYZE IS/IS NOT			
	SPECIFY THE PROBLEM	SPECIFY THE PROBLEM	SPECIFY THE PROBLEM	SPECIFY THE PROBLEM	SPECIFY THE PROBLEM	SPECIFY THE PROBLEM	SPECIFY THE PROBLEM

1. SPECIFY THE PROBLEM 2. ANALYZE IS/IS NOT 3. ID ROOT CAUSES

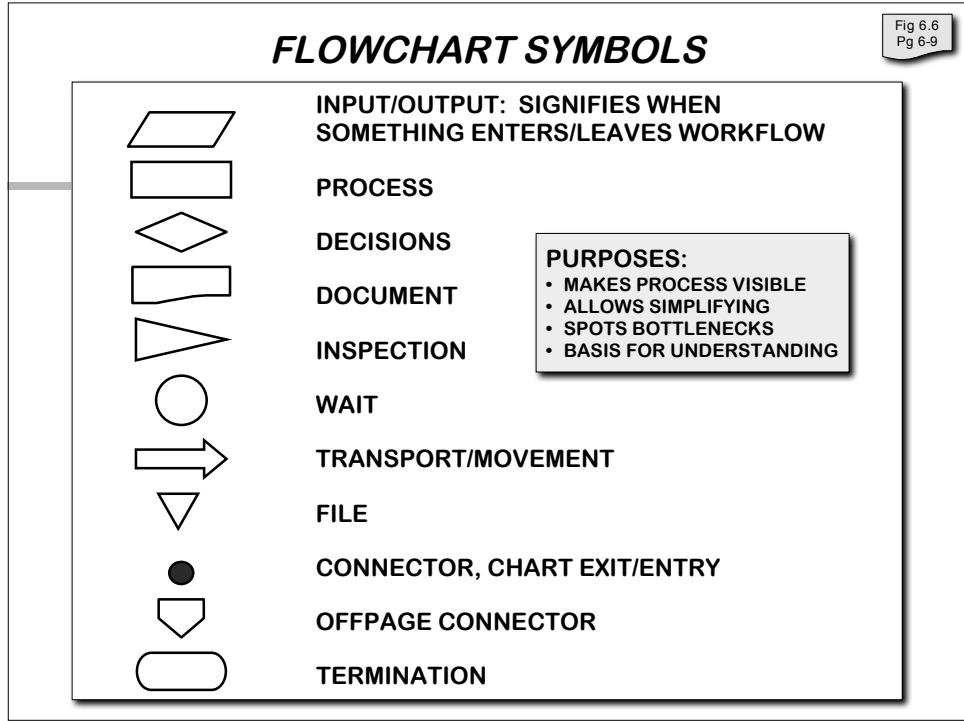
VARIANCE ANALYSIS WORKSHEET							
GENERAL INFO: SEE INSTRUCTIONS				VARIANCE SYSTEM: SEE INSTRUCTIONS FOR USE - SEE INSTRUCTIONS			
1. SPECIFY THE PROBLEM		2. ANALYZE IS/IS NOT		3. ID ROOT CAUSES			
PROBLEM OR VARIANCE	IS	IS NOT	IS	IS NOT	ROOT CAUSE	IS	IS NOT
PROBLEM OR VARIANCE	IS	IS NOT	IS	IS NOT	ROOT CAUSE	IS	IS NOT
PROBLEM OR VARIANCE	IS	IS NOT	IS	IS NOT	ROOT CAUSE	IS	IS NOT
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PROBLEM OR VARIANCE	IS	IS NOT	IS	IS NOT	ROOT CAUSE	IS	IS NOT
PROBLEM OR VARIANCE	IS	IS NOT	IS	IS NOT	ROOT CAUSE	IS	IS NOT
PROBLEM OR VARIANCE	IS	IS NOT	IS	IS NOT	ROOT CAUSE	IS	IS NOT

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VARIANCE SOLUTION WORKSHEET							
GENERAL INFO: SEE INSTRUCTIONS				VARIANCE SYSTEM: SEE INSTRUCTIONS FOR USE - SEE INSTRUCTIONS			
1. LIST CAUSES		2. POSSIBLE SOLUTIONS/CHANGES TO BE MADE					
CAUSE	IS	IS NOT	IS	IS NOT	IS	IS NOT	IS
CAUSE	IS	IS NOT	IS	IS NOT	IS	IS NOT	IS
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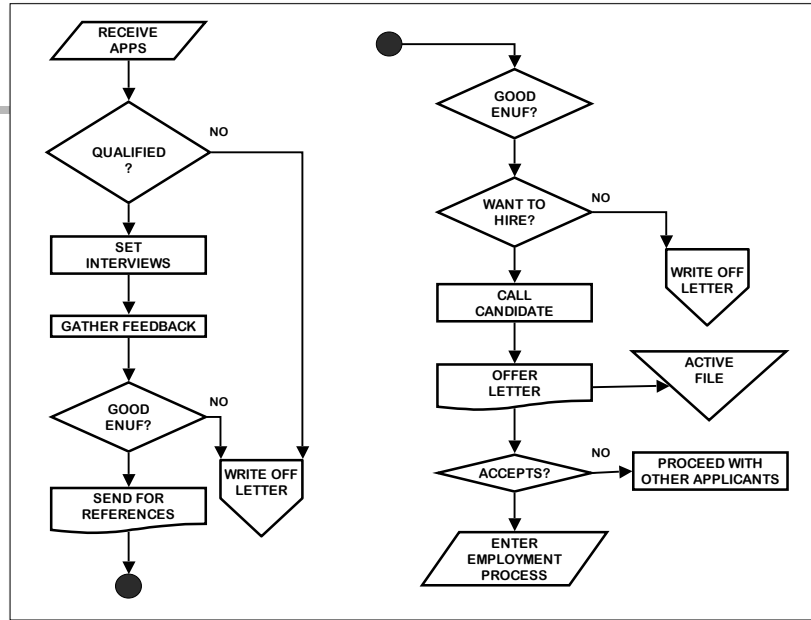
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VARIANCE SOLUTION WORKSHEET							
GENERAL INFO: SEE COMMENTS				VARIANCE SOLUTION: SHOW PROPOSED SOLUTION TO THE VARIANCE			
1. LIST CAUSES		2. POSSIBLE SOLUTIONS/CHANGES TO BE MADE					
CAUSE	CAUSE	CAUSE	CAUSE	CAUSE	CAUSE	CAUSE	CAUSE
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HIRING A NEW ASSOCIATE

Fig 6.7
Pg 6-10

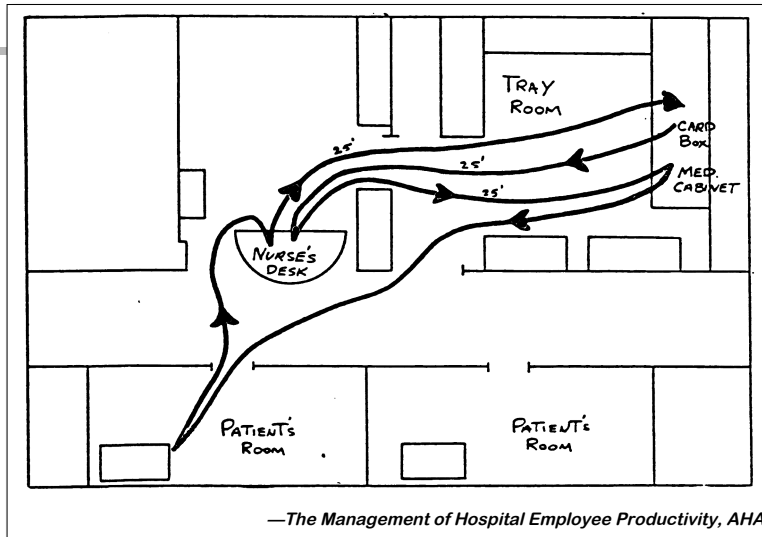


HOPE SPRINGS ETERNAL PART B

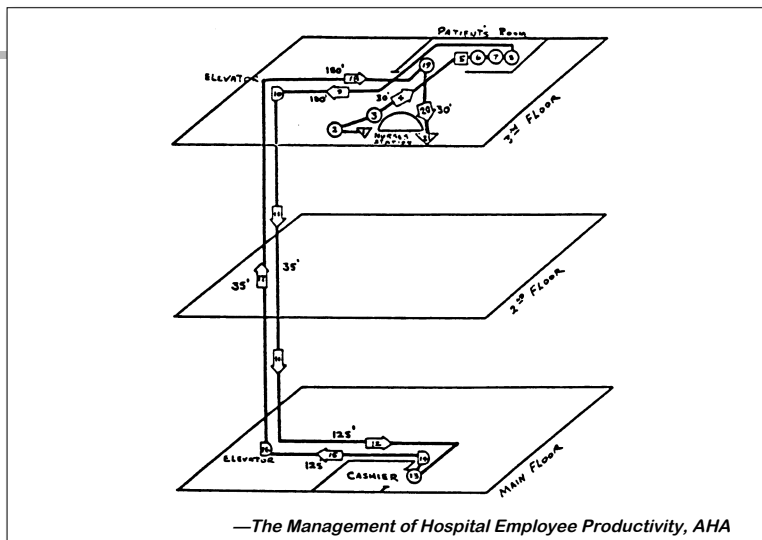
GROUPS OF 4—YOU HAVE 15 MINUTES

Pages
6-11-14

WORK TRAFFIC DIAGRAM MEDICATION CARDS



WORK TRAFFIC DIAGRAM HANDLING OF PATIENTS' VALUABLES



**Northern
Michigan
HOSPITAL**
INTENSIVE CARING

30

NMH PRESENTATION
**WHAT WOULD HAPPEN IF OUR
PROCESS WORKFLOWS WERE IMPROVED?**

DRG COSTS & VOLUME COMPARED TO COMPETITION



***NMH PROCESS WORKFLOWS
ASSIGNMENT***

EACH DEPT TO DIAGRAM 3 PROCESS WORKFLOWS

- HI VOLUME
- HI COST
- HI RISK

**GOAL: IMPROVE PRODUCTIVITY 25% BY *REDUCING*
TIME AND SUPPLIES, OR *INCREASING* THROUGHPUT
(OUTPUT/TIME)**



Fig 6.15
Pg 6-20

Fig 6.14
Pg 6-19

***** END OF REPORT *****

Fig 6.16
Pg 6-22

COST/BENEFIT ANALYSIS

ID'S RELATIONSHIP BETWEEN COSTS & BENEFITS. BEST RATIO MAY NOT BE THE BEST DECISION. USE TO EVALUATE ALTERNATIVES & PREPARE FOR FINANCIAL NEEDS.

COSTS

TANGIBLE = \$

INTANGIBLE

- MORALE, ATTITUDES
- LABOR MARKET IMPACTS
- POLITICAL COSTS
- INDIRECT COSTS
- RESISTANCE APATHY
- CUSTOMER DISAFFECTION

BENEFITS

TANGIBLE = \$

INTANGIBLE

- MORALE, ATTITUDES
- LABOR MARKET IMPACTS
- POLITICAL BENEFITS
- INDIRECT SAVINGS
- WHAT'S IN IT FOR ME?
- CUSTOMER SATISFACTION

CALCULATION

1. DETERMINE RATION OF TANGIBLE COSTS/BENEFITS
2. SPECIFY \$ RETURN IN FIRST YEAR OF IMPLEMENTATION
3. LIST EXPECTED + & - INTANGIBLES — ANY MEASURES?

Pages
6-25

HOPE SPRINGS ETERNAL—PART D

GROUPS OF 4, 15 MINUTES

SIMPLIFY, SIMPLIFY

—THOREAU

OUT OF CLUTTER, FIND SIMPLICITY

—Einstein's Work Rule #1

**TIS THE GIFT TO BE SIMPLE,
TIS THE GIFT TO BE FREE,
TIS THE GIFT TO COME DOWN
WHERE WE OUGHT TO BE.**

—Shaker Hymn

**QUALITY, SPEED & RESULTS:
POWER TOOLS: SAVING TIME, MONEY & EFFORT**

WORK IMPEDIMENTS COST \$60 BILLION

- \$60 BILLION SAVINGS POSSIBLE IN STREAMLINING, JOB REDESIGN, IMPROVING COMMUNICATION & COOPERATION
- 60% OF TOTAL IS IN WASTED TIME: POOR COMMUNICATION & UNNECESSARY PAPERWORK. 20% IN OPERATING INEFFICIENCIES
- HOSPITAL SPENDING PER \$100 OF DIRECT PATIENT CARE:

	<i>AVERAGE</i>	<i>BETTER RUN</i>
• CLERICAL & COMMUNICATIONS	\$53	\$21-42
• ADMINISTRATION	\$25	\$8-15
- CHANGE TO BETTER PRACTICES = 31% DECREASE (\$210 B) IN TOTAL LABOR COST.
- COMPLEXITY COMPARISON: HOSPITALS > 20 X MANUFACTURING

—Modern Healthcare, June 22, 2002

TOP 100 HOSPITAL IMPLICATIONS

IF ALL U.S. ACUTE CARE HOSPITALS PERFORMED AT THE LEVEL OF THE TOP 100 BENCHMARK HOSPITALS, RESULTS WOULD BE DRAMATIC

- AVERAGE LENGTHS OF STAY WOULD DECREASE BY NEARLY HALF A DAY
- INPATIENT MORTALITY AND COMPLICATIONS WOULD EACH DROP BY 22%
- PROFITABILITY, GROWTH IN EQUITY, AND RETURN ON ASSETS WOULD EACH INCREASE SIGNIFICANTLY OVER CURRENT LEVELS
- EXPENSES WOULD BE REDUCED BY AN AGGREGATE \$24.5 BILLION A YEAR
- CHARGES WOULD BE REDUCED BY AN AGGREGATE OF \$43 BILLION/YEAR

—HCIA-MERCER



**HIGHER STANDARDS LEAD TO BETTER
QUALITY OUTCOMES AND LOWER COSTS**

Heart bypass twice as costly in U.S. as in Canada: study

Coronary artery bypass graft surgery costs about twice as much, on average, in a U.S. hospital than in a Canadian hospital, \$20,673 vs. \$10,373, with no difference in clinical outcomes, according to a study in the *Archives of Internal Medicine*. Adjusting for clinical and demographic differences, the U.S. cost was 74.8% higher than the cost in Canada. The difference may largely reflect higher administrative overhead in the U.S. healthcare system, with its multiple payers, than in the single-payer Canadian system, said Mark Eisenberg, a physician at Jewish General Hospital in Montreal who helped lead the study. Defensive medicine and higher across-the-board costs in general also may be factors, Eisenberg said, adding that gauze pads cost twice as much in the U.S. as in Canada. The researchers compared outcomes and treatment costs for 4,698 bypass patients at five U.S. hospitals and 7,319 bypass patients at four Canadian hospitals.

—Modern Healthcare 7/11/05



WHO IS LEAPFROG?

WHY CONSIDER THEIR STANDARDS?

WHERE'S JCAHO? WHO CARES!

WHO: FOLLOWING IOM REPORT, BUSINESS ROUNDTABLE ESTABLISHED LEAPFROG GROUP IN 2002 TO PUT PURCHASING MUSCLE OF CORPORATIONS TO WORK. ORIGINALLY 6, NOW 150, FORTUNE 500 CORPORATIONS. THEIR HEALTH PLANS CURRENTLY INSURE 34M AMERICANS AND REPRESENT \$62 BILLION IN BUSINESS

MESSAGE: MEET THESE STANDARDS IF YOU WANT OUR BUSINESS. PAY MORE TO PROVIDERS WHO COMPLY, INCENTIVES TO EMPLOYEES TO CHOOSE THOSE PROVIDERS, HEALTH PLANS PUT ON NOTICE

FOCUS: THE LEAPFROG GROUP INITIATIVE IS ABOUT PATIENT KNOWLEDGE, PATIENT CHOICE AND PATIENT SAFETY. REFLECTS APPROACH TO PURCHASING BASED ON:

- EVIDENCE BASED MEDICINE (BEST PRACTICES) APPROACH WILL PREVAIL
- WHAT END-USERS/CONSUMERS CAN READILY APPRECIATE & ASSESS
- PATHS TO BREAKTHROUGH IMPROVEMENTS REACHED OVER TIME & THROUGH MARKET INCENTIVES, MANAGEMENT FOCUS & SYSTEMATIC PROCESS IMPROVEMENT
- GOALS THAT WELL-MANAGED HEALTH CARE PROVIDERS CAN REACH (HOSPITALS CAN BE SURVEYED & GET 4 STAR AWARD IF THEY PASS)



LEAPFROG GROUP STANDARDS

PURCHASERS FOCUS ON FOUR SAFE PRACTICES

1. COMPUTER PHYSICIAN ORDER ENTRY (CPOE)
COMPUTERIZED PRESCRIPTIONS IN HOSPITALS. SERIOUS MEDICATION MISTAKES REDUCED BY UP TO 86 PERCENT. DOORWAY TO CONTROLLING MANY OTHER WORK PROCESSES VIA I.T. BACKBONE

2. EVIDENCE-BASED HOSPITAL REFERRAL (EHR)
SELECT EXPERIENCED HOSPITALS WITH PROVEN OUTCOMES FOR SPECIFIC HIGH-RISK CONDITIONS. BEST WAY TO DETERMINE—KNOW ACTUAL RESULTS PATIENTS EXPERIENCE WITH ALL STATES REPORTING INFO PUBLICLY. KNOWN RELATIONSHIP BETWEEN HOSPITAL'S ANNUAL NUMBER OF HIGH-RISK TREATMENTS & PATIENT OUTCOMES

3. ICU PHYSICIAN STAFFING (IPS)
"INTENSIVISTS," PHYSICIANS SPECIALLY TRAINED TO CARE FOR CRITICALLY ILL PATIENTS SHOULD STAFF ICUS. FOUR MILLION ICU PATIENTS ANNUALLY, 500,000 ICU DEATHS ANNUALLY—10% OF DEATHS CAN BE AVOIDED IF ICU INTENSIVISTS PRESENT AT LEAST EIGHT HOURS PER DAY

4. NQF SAFE PRACTICES (LEAPFROG QUALITY INDEX)
NATIONAL QUALITY FORUM-ENDORSED 30 SAFE PRACTICES COVER A RANGE OF PRACTICES THAT REDUCE THE RISK OF HARM IN CERTAIN PROCESSES, SYSTEMS OR ENVIRONMENTS. 27 OF THESE PRACTICES MAKE UP THE *LEAPFROG QUALITY INDEX*

**FIRST 3 STANDARDS ALONE ESTIMATED TO SAVE
59,544 LIVES & \$9.7 BILLION ANNUALLY**

WORK SIMPLIFICATION

FIND SIMPLER & BETTER WAYS TO DO THINGS

IMPROVE WORKPLACE

- ENVIRONMENTAL CONDITIONS: LIGHT, HEAT, SOUND
- ORGANIZE: REDUCE CLUTTER & FINDING TIME



TOOLS

- NEAR WORK STATION, ALL TOOLS NEEDED ARE PROVIDED
- NO SHARING TOOLS, RESPONSIBLE FOR OWN



PRINCIPLES OF MOTION

- PREPOSITION WORK/SUPPLIES—A FIXED PLACE
- SHORTEN TRANSPORT DISTANCE
- WORK WITHIN ARM'S LENGTH
- DO SIMILAR WORK IN BATCHES WHENEVER POSSIBLE
- SAFETY FIRST: LIFT WITH LEGS; SLIDE INSTEAD OF CARRY



WORK MANAGEMENT

- NO RE-DO'S, DO IT RIGHT THE FIRST TIME
- DON'T DO SAME PIECE OF WORK OVER & OVER
- AUTOMATE TASKS/SYSTEMS WHEREVER POSSIBLE
- ASSIGN TO LOWEST POSSIBLE WORKER LEVEL
- IMPROVE PROCESSES—REDUCE VARIATION, COSTS, CYCLE TIMES



Fig 7.1
Pg 7-1

STEP 3—IMPLEMENT SOLUTIONS

1. TEST FOR SOLUTION WORTHINESS
2. SELL YOUR SOLUTION— *MANSYS GUIDELINES*
3. CREATE ACTION PLAN & IMPLEMENTATION SCHEDULE— *GANTT CHART*
4. IMPLEMENT & ADDRESS CHANGE RESISTANCE

SPECIAL USE TOOLS

- *GANTT CHART*

IS YOUR PROPOSAL WORTHY?

$$\text{EDM} = \text{Q} + \text{A}$$

- ✓ FIT WITH VALUES & MISSION?
- ✓ FIT WITH KRAs?
- ✓ DOES IT PROVIDE A COMPETITIVE ADVANTAGE?
- ✓ WILL OTHER PROJECTS BE DELAYED?
- ✓ FIT TODAY'S ORGANIZATION EMPHASIS?
- ✓ HOW IMPORTANT TO THE FUTURE?
- ✓ DOES IT COST A LOT?
- ✓ HAVE ALL DEPARTMENTS BEEN CONSULTED?
- ✓ HOW WILL CHANGE FACTORS BE MANAGED?
- ✓ IS POLITICAL WIRING ACCOMPLISHED?

SELLING YOUR SOLUTIONS

Fig 7.2
Pg 7-2

- ✓ ***BE CONCISE, CALM, COOL & COLLECTED***
 - REHEARSE—DON'T RAMBLE OR APPEAR SCATTERED
 - ORGANIZED—VISUALS, HANDOUTS, FLIPCHARTS
 - ALWAYS PRESENT COMPLETED STAFF WORK
- ✓ ***FOLLOW ORGANIZATION PROPOSAL FORMAT***
 - STATEMENT OF THE PROBLEM & OBJECTIVE
 - ASSUMPTIONS MADE
 - SUMMARY DATA FINDINGS & MEASUREMENTS
 - COST/BENEFIT & ROI ARGUMENTS
 - ALTERNATIVES IDEAS CONSIDERED
 - PLAN FOR IMPLEMENTATION
 - BENEFITS OF RECOMMENDATION
 - POTENTIAL PROBLEM AREAS
 - ACCOUNTABILITIES
- ✓ ***CLOSE: Q&A, REQUEST APPROVAL***



STEP 4—TRACK RESULTS

1. GET FEEDBACK ON HOW IT'S TRACKING
 - DECIDE DATA NEEDS: BY WHOM, HOW OFTEN, HOW REPORTED & TO WHO?— TRACKING CHECKLIST, HISTOGRAM
 - USERS' SUBJECTIVE OPINIONS—ASSIGN STEWARD MONITOR
 - WHAT DO VARIANCE MEASURES REVEAL? WHAT PROBLEMS SHOW UP ON PARETO & CONTROL CHARTS?
2. DEALING WITH BUMPS IN THE ROAD
 - SMOOTH FEATHERS, DON'T BLAME, RECONVENE GROUP
 - MISTAKES—SUCCESS AT LEARNING WHAT WON'T WORK
 - DEFINE THE BUMP—WAS IT ANTICIPATED
 - WHAT'S MISSING? $\Delta = D \times M \times P > \text{COSTS}$
 - DECIDE WHETHER TO PATCH OR RECYCLE DO-IT
3. REFINING—HEART OF CI
 - SOLUTIONS INVARIABLY REVEAL NEW PROBLEM PIECES
 - FIRST ROUND ADEQUATE, SOMETIMES INSUFFICIENT
 - OTHER TOOLS & BRAINS: SURVEYS, INTERVIEWS, FOCUS GROUPS

TRACKING RESULTS CHECKLIST			
PROJECT NAME:		DATE:	
IMPLEMENTATION			
1 All steps of plan carried out?	YES	NO	NOTES:
2 Project done on time & in budget?			
3 All affected by the change involved?			
4 Were all parties communicated with?			
5 Was follow through adequate?			
CUSTOMER FEEDBACK			
1 Is the Customer happy?	YES	NO	NOTES:
2 What expectations not yet met?			
3 What do measures show?			
4 What quantitative measures needed?			
SYSTEM FEEDBACK			
1 What do Associates report?	YES	NO	NOTES:
2 What do suppliers suggest?			
3 Who needs a report on progress?			
4 What quantitative measures needed?			
SOLUTION PROBLEMS			
1 Was the timing acceptable?	YES	NO	NOTES:
2 What problems still exist?			
3 What do variances reveal?			
4 Are variances acceptable?			
5 Was Solution adequate?			
6 If not, can it be improved now?			
HUMAN FACTORS/PROBLEMS			
1 Any people barriers in the way?	YES	NO	NOTES:
2 3-Rs provided to support change?			
3 What political barriers need attention?			
MEASUREMENT OF VALUE/ROI			
1 What tangible pay off has provided?	YES	NO	NOTES:
2 What is the estimated Spay off			
3 What intangible benefits?			
4 Was the result worth the work?			
CONCLUSION			
1 Was the change beneficial?	YES	NO	NOTES:
2 Should solution be left as is, or revised?			
3 Who should be included in this decision?			
4 Should results be communicated?			

WHERE & WHEN TO USE TOOLS													
	DEFINE PROBLEM			OUTLINE OPTIONS			IMPLEMENT SOLUTIONS			TRACK RESULTS			PAGE
	STATE PROBLEM	USE DATA SOURCES	SELECT PROJECT TEAM	ANALYZE PROBLEM DATA	IDENTIFY ROOT CAUSES	CONSIDER POSSIBLE SOLUTIONS	CREATE ACTION PLAN	SELL PROPOSAL	IMPLEMENT & MANAGE CHANGE	GET FEEDBACK	DEAL WITH PROBLEMS	REFINE/ RECYCLE PROCESS	
CORE TOOLS													
BENCHMARKING	2	1									2	2	1-5
BRAINSTORMING	1		2	1		1	2				1	1	6-2
CONTROL CHART		1								1		2	5-17
COST/BENEFIT ANALYSIS						1	2	2			2	2	6-23
DECISION MATRIX						1					2	2	6-18
FISH BONE CHART				2	1						2	1	6-3
FLOWCHART				1	1	2	2					2	6-8
HISTOGRAM		1								1		2	5-6
MANSYS PROPOSAL GUIDE								1			2		7-1
PARETO CHART		1				2						2	5-8
RUN CHART		1								1		2	5-11
TRACKING CHECKLIST											1		9-1
WORK TRAFFIC DIAGRAM				1		1	2		2		2	2	6-15
SPECIAL USE TOOLS													
CUSTOMER PROXY	2	1								2		1	4-3
CYCLE TIME ANALYSIS	2			1		1	2		2		2	2	6-26
FOCUS GROUPS	2	1								2		1	4-4
GANTT CHART									1			2	7-3
INTERVIEWS	2	1								2		1	4-4
SAMPLING	2	1								1		1	4-4
STRATIFICATION					1						2	1	4-4
SURVEYS	2	1								2		1	4-4
VARIANCE ANALYSIS				1	1						1	1	6-31
VARIANCE SOLUTION						1					1	1	6-33
WORK SIMPLIFICATION				1		1					1	1	6-25

1 = Primary Application; 2 = Secondary; Blank = None/Pare.

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1 = Primary Application; 2 = Secondary; Blank = None/Rare.

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PART C

IMPROVING GROUP DYNAMICS AS A PROCESS

CREATIVITY CLOG

CREATIVITY & VOLUME LEVEL

GROUP DYNAMICS

- MEMBERSHIP NON SELECTIVE, DYNAMICS UNSOUND
- LACK OF OWNERSHIP, WISHY-WASHY COMMITMENT
- GROUP PARTICIPATION UNREWARDED
- STAGNANT THINKING; POOR GROUP MECHANICS

PROBLEM APPROACH

- DON'T UNDERSTAND PROBLEM—NEED MORE DATA, MEASURES
- PIECEMEAL VS WHOLE PROBLEM—NO SYSTEM PERSPECTIVE
- UNSOUND SOLUTIONS—NO BUSINESS SENSE, NO FACTS
- PROBLEM TOO DIFFICULT, NEED NEW PS/DM TOOLS

IMPLEMENTATION

- NO IMPLEMENTATION PLAN—PUT ON HOLD
- POOR FOLLOWUP AND FOLLOW THROUGH—HOLD GROUP ACCOUNTABLE FOR SUCCESSFUL IMPLEMENTATION

TIME

IMPROVING SMALL GROUP PROCESS

SOLVE TIME RELEASE PROBLEM

- SPECIFY #HR/DAY FOR GROUP WORK
- SPECIFY DAYS FOR GROUP WORK
- DO NOT DISTURB SIGNS, BEEPER RULES
- HIRE FLOATERS, MANAGER SUBBING
- MONITOR ROI, DEMONSTRATE VALUE

IMPROVE GROUP SELECTION & DYNAMICS

- DON'T SELECT DEADHEADS, DON'T KEEP NON PERFORMERS
- 3-R GOOD GROUP/INDIVIDUAL PERFORMANCES
- STOP PROJECT WORK & FIRST "GET GOOD GROUP" DYNAMICS

TRAINING IN PROCESS & TOOLS

- MEMBER ROLE ASSIGNMENT & TRAINING; FACILITATOR TRAINING
- MANDATORY USE OF FLIP CHARTS
- FACILITATOR & GROUP PERFORMANCE FEEDBACK
- NO MORE SHOOTING FROM THE HIP—USE THE TOOLS!

IMPROVING SOLUTION RATE

- NON TRADITIONAL THINKING, OUTSIDE THE BOX
- BETTER MANAGEMENT OF IMPLEMENTATIONS
- MEASURE: DID IT SOLVE THE PROBLEM
- SOLUTION RE-EVALUATION BY DIG

EXECUTIVE SUPPORT

- FAST FEEDBACK, RAPID APPROVALS
- MONETARY SUPPORT, PUSH FOR CHANGE
- POLITICAL BARRIER BOMBER

BRAIN-STORM

PURPOSE: GENERATE MANY & ZANY IDEAS

- AVOID SMALL, TUNNEL, ONLY ONE ANSWER THINKING

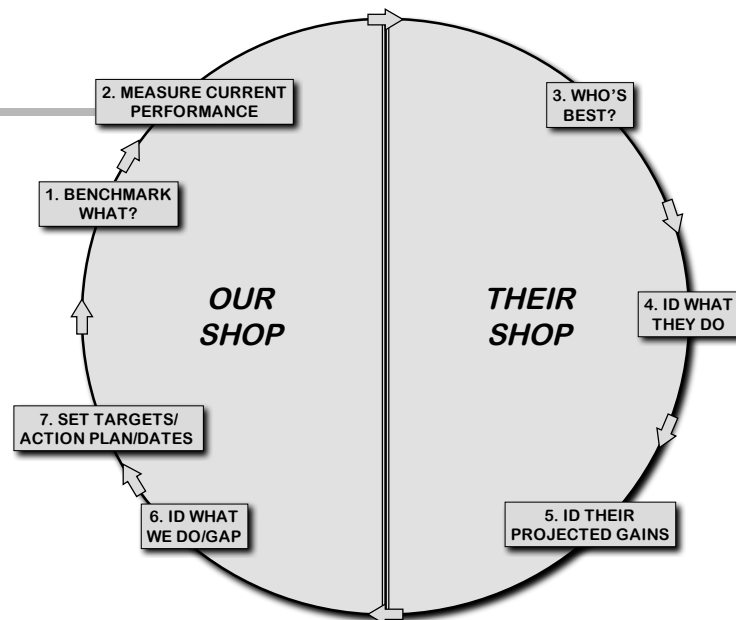
RULES

- ALWAYS VISUAL ON FLIPCHARTS
- CREATE OPTIONS FURIOUSLY, PRAISE ALL IDEAS
- NO CRITICISM, NO ANALYSIS, NO DISCUSSION
- DO CRITICAL THINKING LAST—DO IDEAS FIT THE FACTS?

TECHNIQUES

- RANDOM—MOST COMMON
- ROUND ROBIN—CONTROLS CONTRIBUTION & DOMINANCE
- PAPER SLIPS—LEAST THREATENING
- NOMINAL GROUP TECHNIQUE = PAPER SLIPS + DISCUSSION + GROUP RANKING

BENCHMARKING IMPROVEMENT CYCLE



BENCHMARKING ASSIGNMENT

IN THE NEXT 90 DAYS...

- IDENTIFY A PROCESS TO BENCHMARK
- CONTACT AN OUTSIDE ORGANIZATION THAT REPRESENTS A “BEST PRACTICE”
- GO AND SEE WHAT THEY DO
- MAKE CHANGES BACK HOME
- SET UP A SCHEDULE FOR REGULAR “OUTLOOKS”



CI: SYSTEMS & SOLUTIONS

DISCUSSION TOPICS

1. HOW CAN WE IMPROVE DIGs/JDI's CHANGE PROCESS? WHAT NEEDS FIXING IN TERMS OF PROJECT SELECTION, MESHING NEW CI TOOLS WITH KNOWN DO-IT STEPS, APPROVAL TIMELINES, IMPLEMENTATION? HOW REV IT UP OR REFINE?
2. CI PROBLEM SELECTION STRATEGY: ID ITEMS RELATED TO MARKET OR CUSTOMER NEEDS THAT ARE HIGH COST, HIGH VOLUME, OR HIGH IN RESULTS VARIATION. WHAT PROCESSES/SYSTEMS NOT WORKING RIGHT? ID TOP 1-3 TO ATTACK:
 - CLINICAL CARE PROCESSES/SYSTEMS
 - CUSTOMER PROCESSES/SYSTEMS
 - STAFF PROCESSES/SYSTEMS
 - MANAGEMENT PROCESSES/SYSTEMS
3. INTERDEPARTMENTAL PROBLEMS: WHAT'S NEEDED IN ADDITION TO CI TOOLS TO MAKE INTEGRATION OF CI EFFECTIVE IN THE REAL WORLD? (POLITICS, RESOURCES, PRIORITIES). HOW DEAL WITH BLOCKAGES THAT CURRENTLY IMPEDE REFINING WORK PROCESSES?
4. WHAT NAH CHANGE WORK IS NOT DONE AND MAY TRIP UP NEW CI EFFORT? HUMAN RESOURCES, CUSTOMER STUFF, LACK OF MANAGER POWER, PAST HISTORY. WHERE WILL MORE ADVANCED IDEAS BE AT RISK BECAUSE FOUNDATIONS ARE WEAK?
5. MANAGER FREAKOUT—IN INCREASING OUR MANAGEMENT SOPHISTICATION CREATING MORE PROBLEMS THAN IT'S WORTH? CAN WE KEEP UP? DO WE NEED CI?
6. ASSOCIATE NEEDS: RELEASE TIME FOR TRAINING & PARTICIPATION, LACK OF NAH ORIENTATION & UNDERSTANDING, PERCEIVED THREAT OF CHANGE? WHAT'S NEEDED TO FREE UP ASSOCIATE TIME & MOTIVATION FOR WORK ON DIGs & CI?

WHAT ARE YOU DOING HERE?

EXCELLENCE: n, STATE OF EXCELLING; SUPERIOR MERIT, VIRTUE, EMINENCE; TRANSCENDENCE, EXTRAORDINARY, WORTHY, CHOICE, ADMIRABLE, FIRST RATE, REMARKABLY GOOD.



**IF YOU DON'T DO IT EXCELLENTLY,
DON'T DO IT AT ALL. BECAUSE IF IT'S
NOT EXCELLENT, IT WON'T BE
PROFITABLE. IF IT'S NOT EXCELLENT
IT WON'T BE FUN; AND IF YOU'RE
NOT IN BUSINESS FOR FUN OR
PROFIT, WHAT THE HELL ARE YOU
DOING HERE?**

—Robert Townsend