

# GAIN SHARING TO IMPROVE HEALTH CARE DELIVERY



**Profit Sharz**

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# AGENDA

1. Who are we?
2. Topical problems
3. Gain Sharing solution?
4. Case Study
5. Test Proposal

# Who are we?

## Principals of ProfitSharz

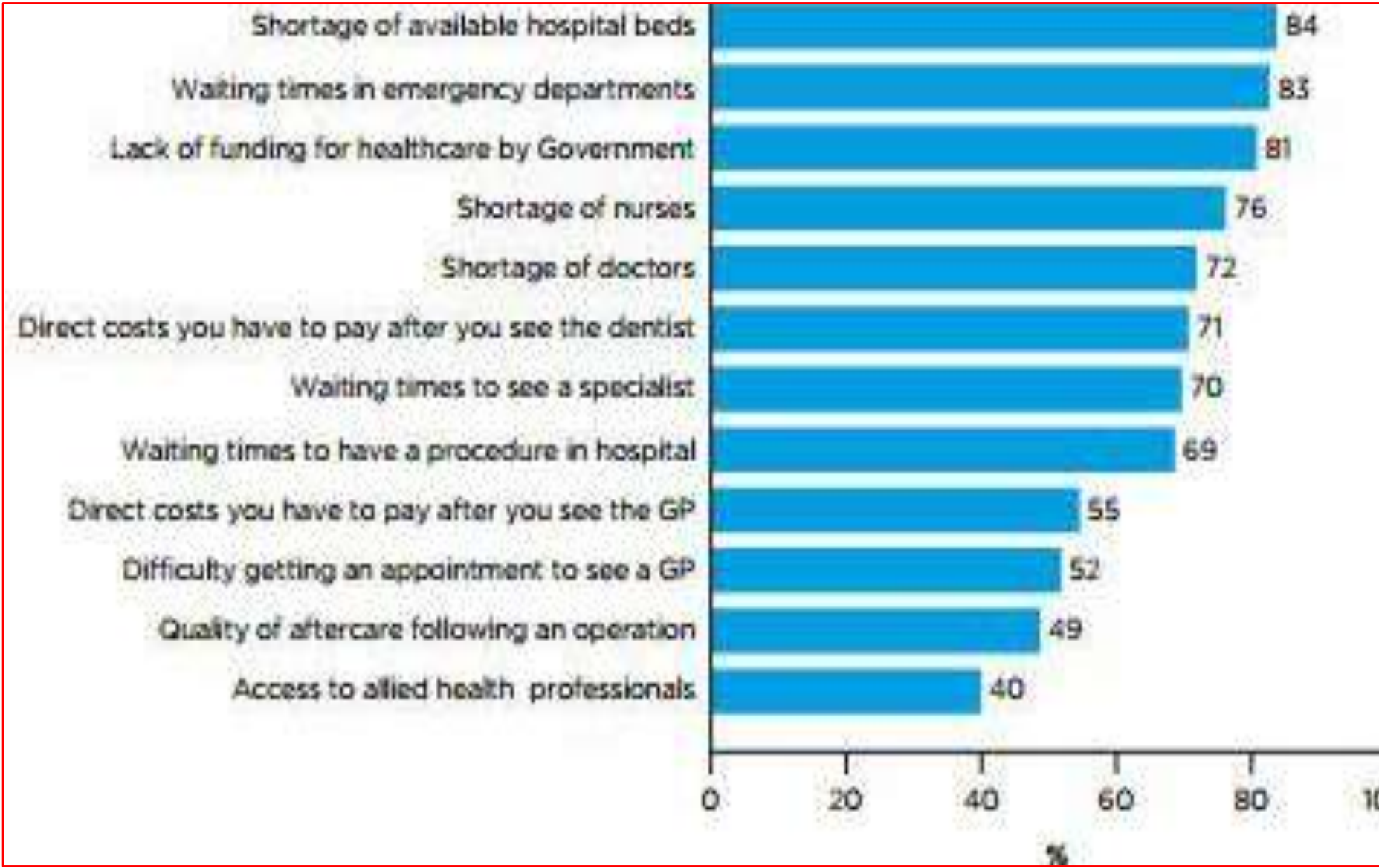
- **Stuart McGill MA LLB PhD (Econ)**
  - Economist, digital marketing, productivity focus
  - Health, environmental & management experience
  - Combining gain sharing, social design, gamification
  
- **Ed Kazmierczak BSc (Hons) PhD (Science)**
  - Software Engineering, Melbourne Uni
  - Safety critical systems background
  - Health tech in regional environments



# PROBLEMS:

Despite the best efforts of all,  
there is much to be addressed

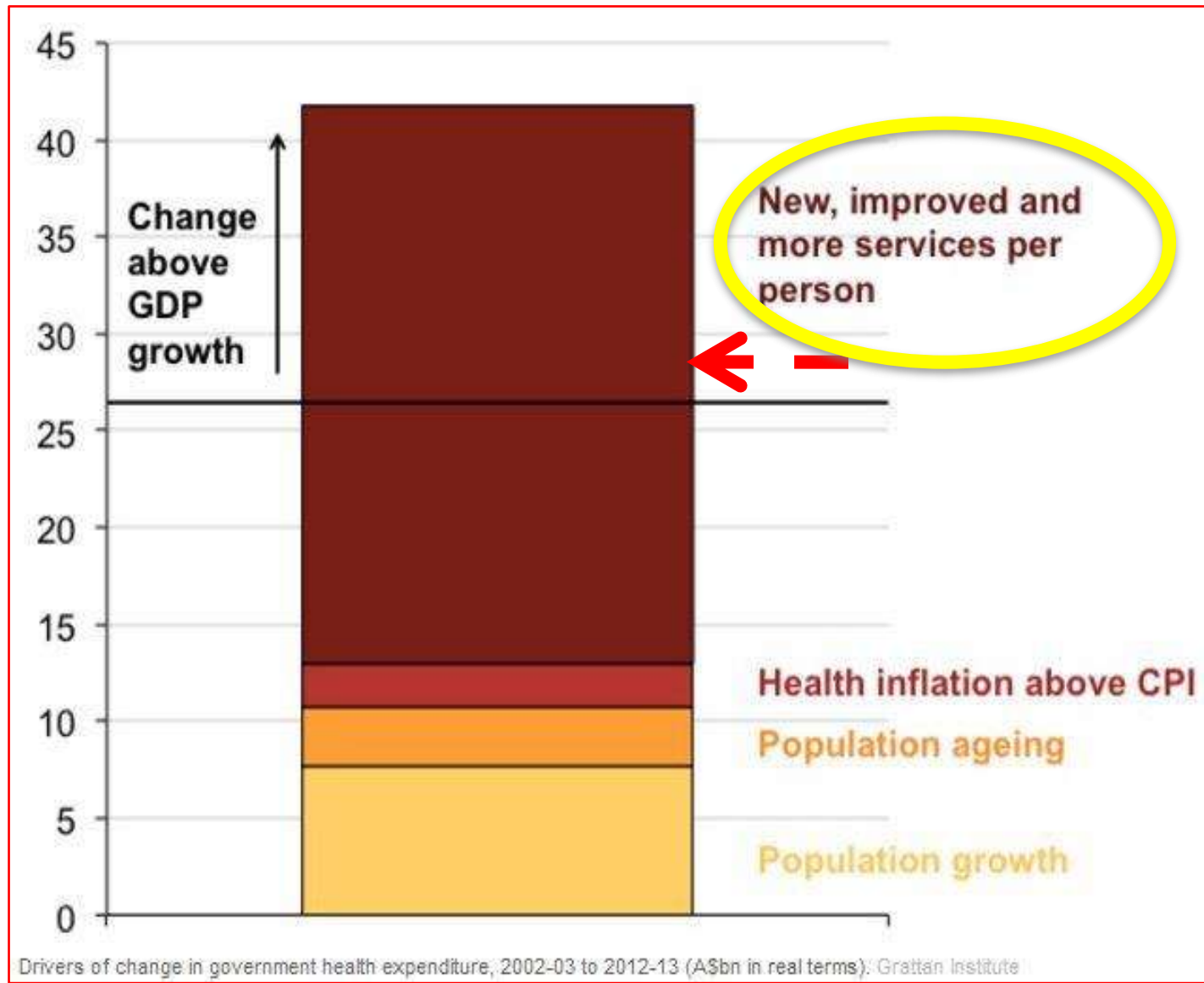
# Key health concerns of Australian public



# Hospital expenditure – Australia

- Public hospitals spent \$40B in 2011–12.
- After inflation, increased 5.9% each yr from 2007–08 to 2011–12

# Factors driving accelerating cost



# No. of patient days (demand) up

- Up 1.8% between 2011-12 and 2007-08
- Up 1.3% between 2011-12 and 2010-11

| <b>Vic patient days</b> |             |             |              |              |              |
|-------------------------|-------------|-------------|--------------|--------------|--------------|
|                         | <u>FY 8</u> | <u>FY 9</u> | <u>FY 10</u> | <u>FY 11</u> | <u>FY 12</u> |
| Public – Pt days        | 4,427,962   | 4,499,508   | 4,606,599    | 4,722,672    | 4,782,281    |
| Private – Pt days       | 2,091,331   | 2,060,800   | 2,235,086    | 2,166,659    | 2,261,615    |



## Vic surgical wait decreasing, but significant

|   | <u>FY 8</u> | <u>FY 9</u> | <u>FY 10</u> | <u>FY 11</u> | <u>FY 12</u> |
|---|-------------|-------------|--------------|--------------|--------------|
| Days waited @ 50 <sup>th</sup> percentile | 32          | 31          | 35           | 36           | 36           |
| Days waited @ 90 <sup>th</sup> percentile | 220         | 221         | 196          | 181          | 189          |
| More than 365 days                        | 3.6         | 2.9         | 2.8          | 2.5          | 2.4          |



## Nearly half of hospital infections 'avoidable'

Medication error costs Victorians approx \$200M per yr

## Medication Errors: The facts



- Most common type of error to occur
- Potentially serious and harmful consequences.
- Over 1.5 million Australians experience an adverse effect from medications each year costing ~ \$660 million
- 2-3% of all admissions have an adverse medication event
- Paediatrics has a high error rate reported globally
  - 3 x times more likely to result in harm

# High bed use drives ramping

85% recommended to prevent ramping

**2011/12:**

## Bed utilisation of Vic public hosp beds

|                                |              |
|--------------------------------|--------------|
| Total patient days             | 4,782,281    |
| Patient Days available in beds | 4,880,050    |
| Capacity utilisation           | <b>98.0%</b> |

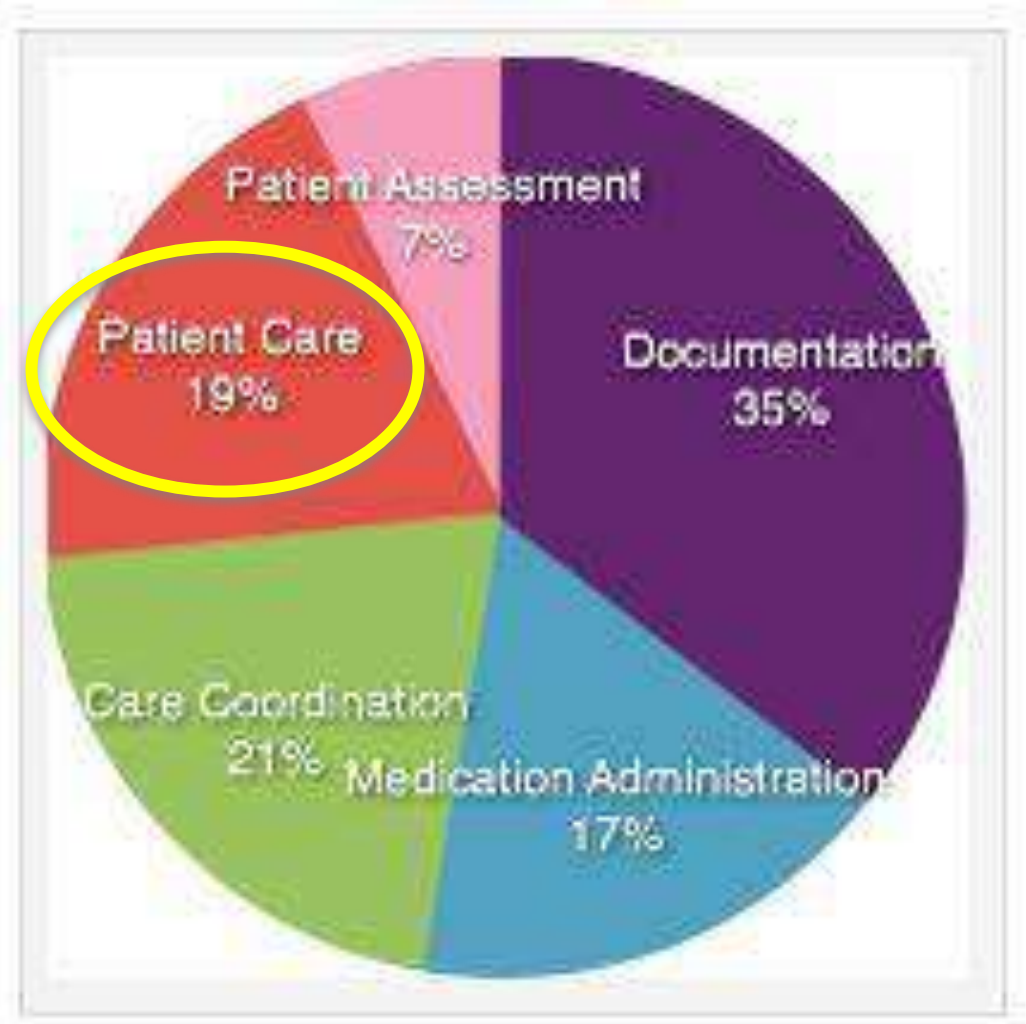
*\* Possibly small over estimate due to rounding*

# 2014 target in Victorian EDs: 81% depart in 4 hrs?

Table 4: State and territory National Emergency Access Targets: percentage of *all patients* departing ED within four hours, 2012–2015

| State and territory National Emergency Access Targets (%) |      |      |      |      |
|---|------|------|------|------|
|   | 2012 | 2013 | 2014 | 2015 |
| New South Wales   | 69%  | 76%  | 83%  | 90%  |
| Victoria*   | 70%  | 75%  | 81%  | 90%  |
| Queensland  | 70%  | 77%  | 83%  | 90%  |
| Western Australia   | 76%  | 81%  | 85%  | 90%  |
| South Australia   | 67%  | 75%  | 82%  | 90%  |
| Tasmania  | 72%  | 78%  | 84%  | 90%  |
| Australian Capital Territory                              | 64%  | 73%  | 81%  | 90%  |
| Northern Territory*                                       | 69%  | 75%  | 83%  | 90%  |

Nurse time: more productivity can leave more time for patient care





## Culture & communication:

60% of nurse don't report near misses

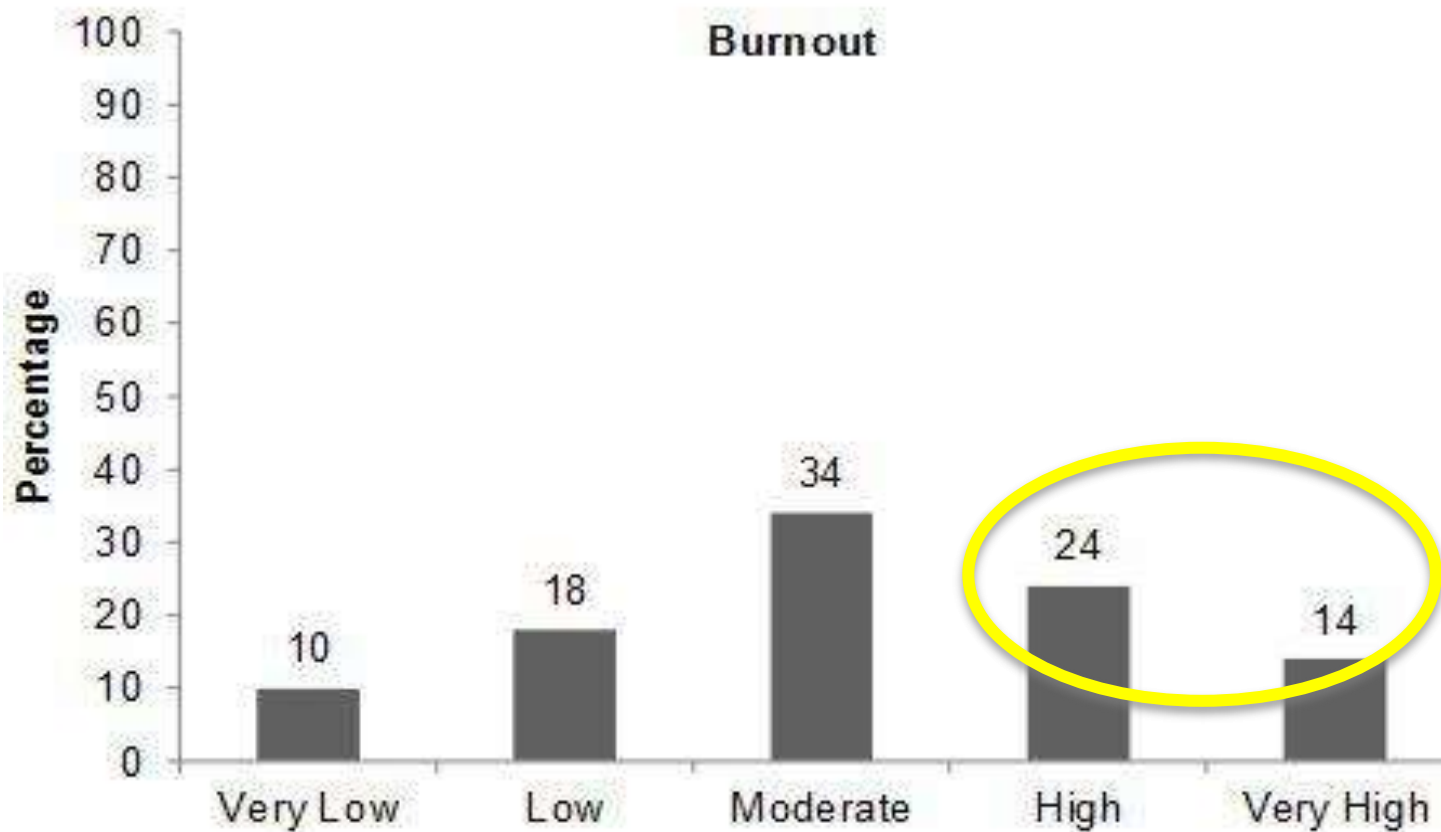
GE survey of nurses in 3 developed countries





# Nurse burnout is high (40%)

Monash University major study



# Stress is biggest reasons nurses leave

| Reasons for planning to leave nursing | Frequency | Examples from the text   |
|---------------------------------------|-----------|--|
| Stress & work pressure                | 43 (93%)  | <i>"A once great and satisfying job has become unrewarding and too demanding." (ID:92)</i>   |
| Dissatisfaction with pay              | 39 (85%)  | <i>"We don't get paid enough for the stress and work we do." (ID:346)</i>  |
| Work/family conflict                  | 36 (78%)  | <i>"I have burnt out due to shift work especially enforced night shift ...too tough on me and my family." (ID:342)</i>   |
| An ineffective unit manager           | 24 (52%)  | <i>... "the final straw a unit manager with less experience than me telling me how to do my job and not even making sure we have the equipment and resources to do it". (ID:211)</i> |
| Lack of a Career Pathway              | 9 (20%)   | <i>"...more responsibility comes with post grad specialties, but virtually no chance of moving up the career ladder goes with that." (ID:284)</i>                                    |
| Bullying and harassment               | 5 (11%)   | <i>"there is serious horizontal violence and cattiness in nursing, lateral bullying that goes on and I'm completely sick of dealing with it." (ID:208)</i>                           |

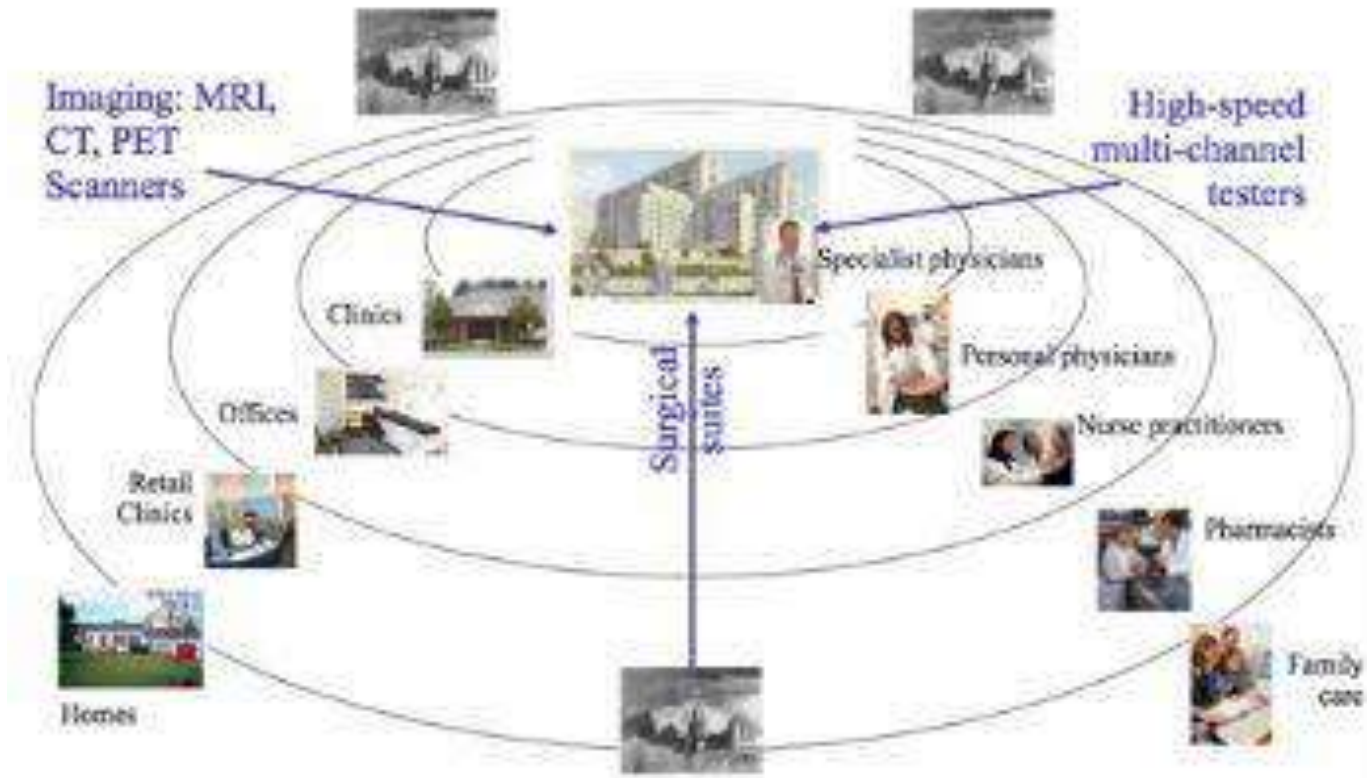
# Vic hospitals financial results

Auditor General Data

- Combined financial results...
  - operating **deficit**:
    - 2011–12: \$43 M
    - 2010–11: \$102 M
- Net Assets \$7B

# Insufficient funds for health tech potential

**The decentralization that follows centralization is only beginning in healthcare**



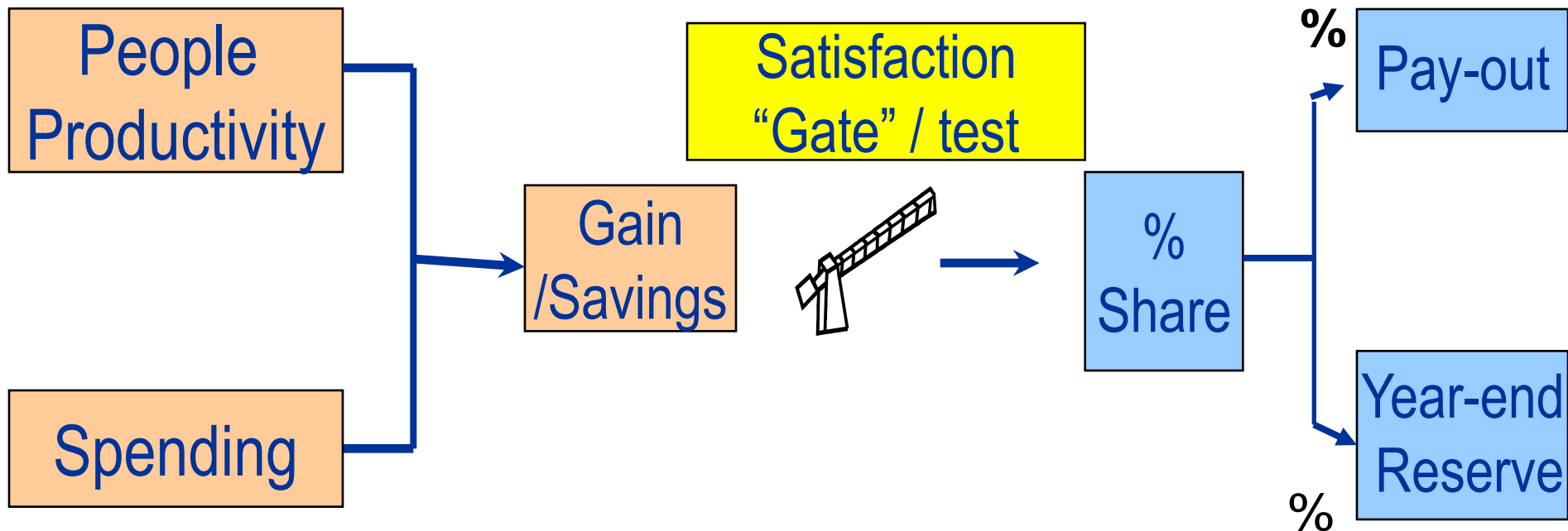
Sum of some key problems or “pain” points

- Accelerating costs
- Ramping
- Surgical wait times
- Hospital acquired infections
- Medical errors
- Nurse turnover



# GAIN SHARING

# Gain Sharing can be part of the solution



*Building productivity, communication, satisfaction*

# Definition

A system or philosophy of management that promotes higher levels of organisational performance

- through the involvement and participation of its people.
- depending on performance, the group share financially in the gain.



# People at coalface have good ideas

- Performance improvement suggestions
- Empower decisions
- Involvement Team responsible for:
  - Soliciting Ideas
  - Reviewing and Investigating ideas
  - Approving or declining ideas
  - Implementing and following through
  - Providing timely feedback

# Fosters “Owner” thinking

Owner



Would you act differently if you owned your area?

Renter



## Employers



### Gamified Tools:

1. Calculate **scenarios**.
  2. **Agree** targets / \$ splits.
  3. Generate **improvements**.
  4. **Track** progress.
- + training

## Employee eGroups

# Key elements of gain sharing

1. **Goals**
2. **Rules**
3. **Autonomy**
4. **Feedback**

**GRAF**

# Why it works

## Unique mix of:

- Proven gain sharing concept
- “Crowd sourced” suggestions by team
- Gamification & income incentives
- Positive psych advances re motivation
- Social media interaction

# Separate to any collective agreement

- Complements what any union does
- If union wishes, involve it
- Separate from any collective agreement
- Is based on commercial contract law, not IR law



# CASE STUDY

# Hackensack UMC, NJ

- 775-bed non-profit, research & teaching hospital
- Employs 8,000+
- 1,600 physicians



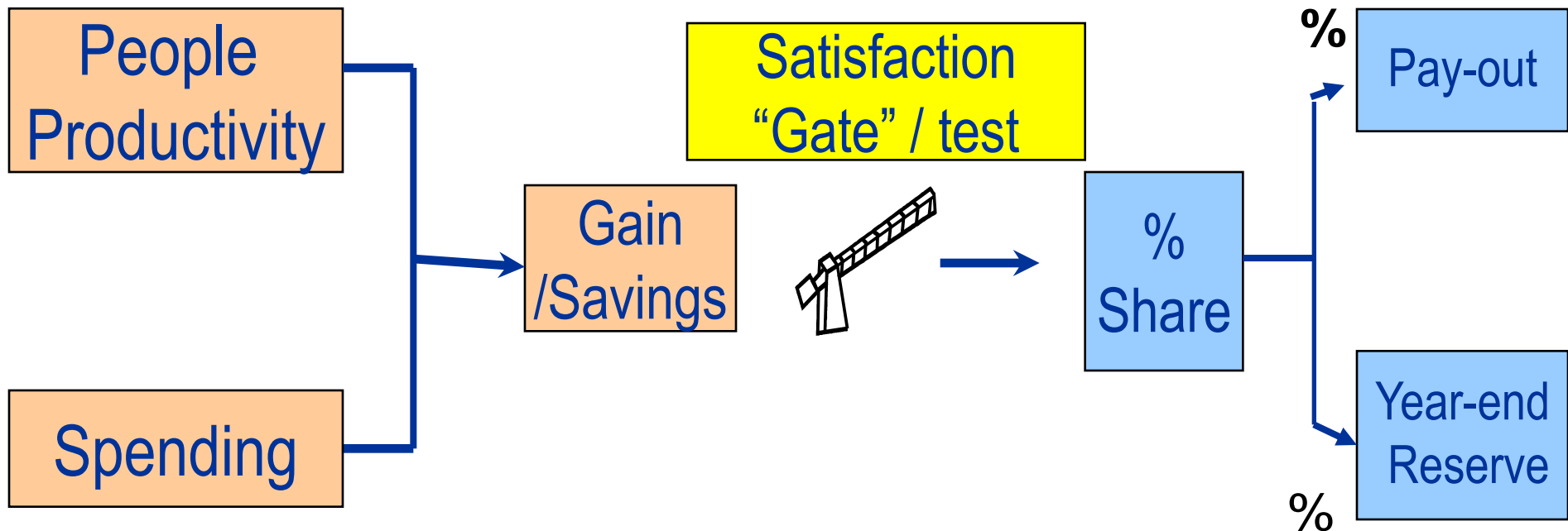


## Robert Masternak as advisor

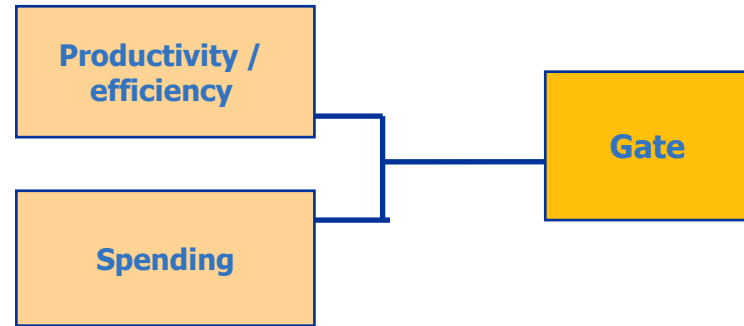
- 25 years experience with gain sharing
- Blue & white collar experience
- Advises ProfitSharz



# Gain Sharing solution



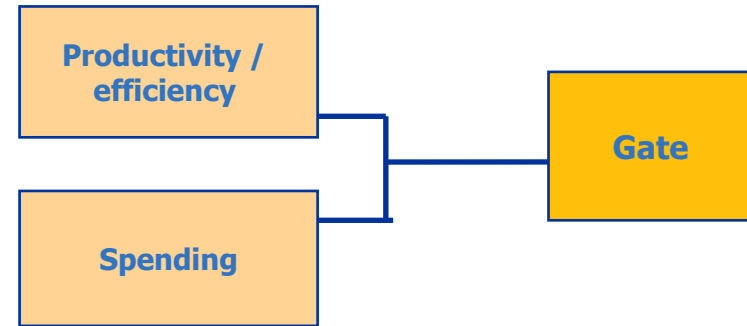
# Productivity



$$\text{People Productivity} = \frac{\text{Hours Worked}}{\text{Number of cases}}$$

- Hours Worked:
  - ✓ All hours worked that are charged to CAS unit
  - ✓ Excludes time paid but not worked (i.e. PTO)
- Cases:
  - ✓ All the cases completed in CAS regardless of length of time or cost per case.

# Spending

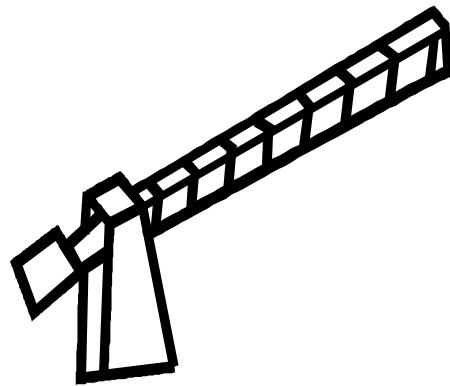


$$\text{Spending} = \frac{\text{Selected Spending Accounts}}{\text{Number of Cases}}$$

- Spending sub accounts include:
  - ✓ Medical Surgical – Patient Charged
  - ✓ Medical Surgical – Items Non-Charged
  - ✓ General Supplies

# “Gate” of patient satisfaction

In this case, 35% of gain is shared with employees provided the “gate” of Patient Satisfaction is met.



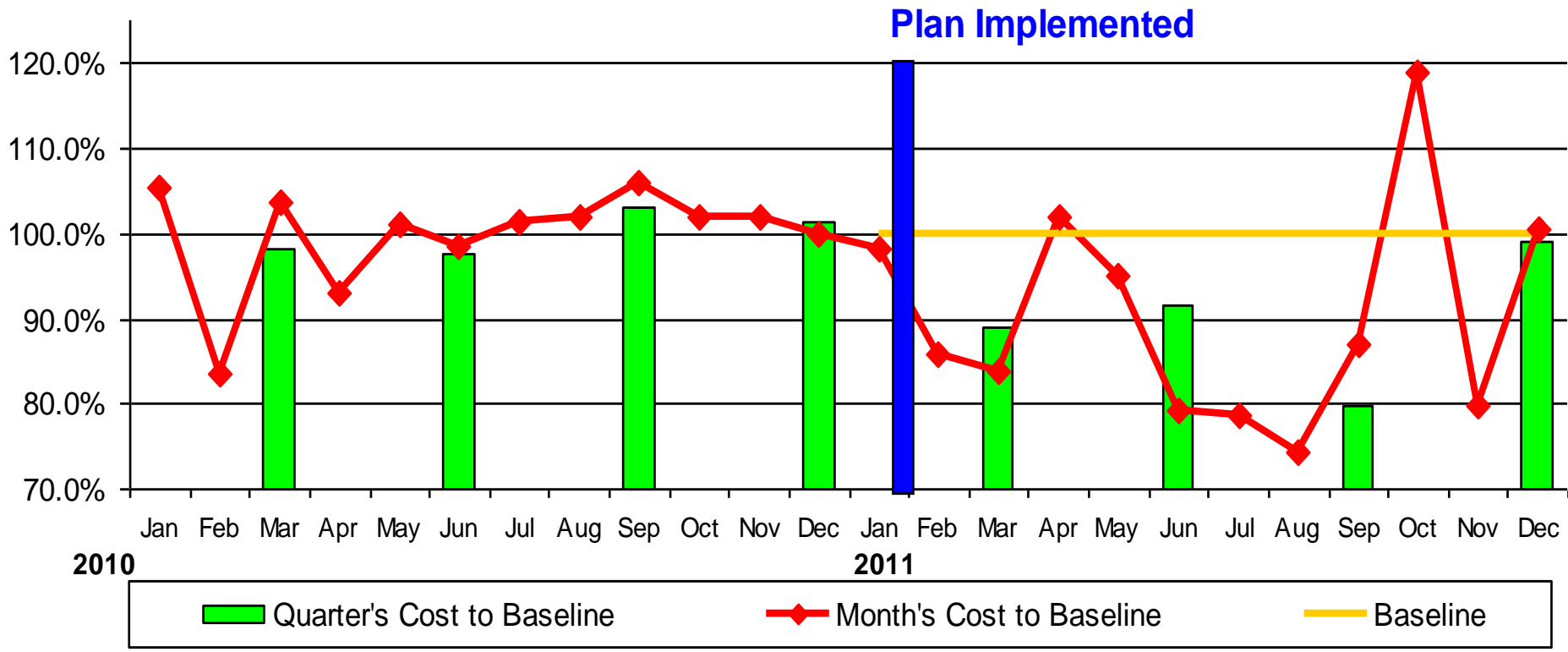
# Monthly Staff Meeting

- Administrative Director conducts monthly “all-hands” meetings to review:
  - ✓ Quarter-to-date results
  - ✓ Specifics of cost accounts
  - ✓ Status of cost savings ideas
  - ✓ Details of patient satisfaction results

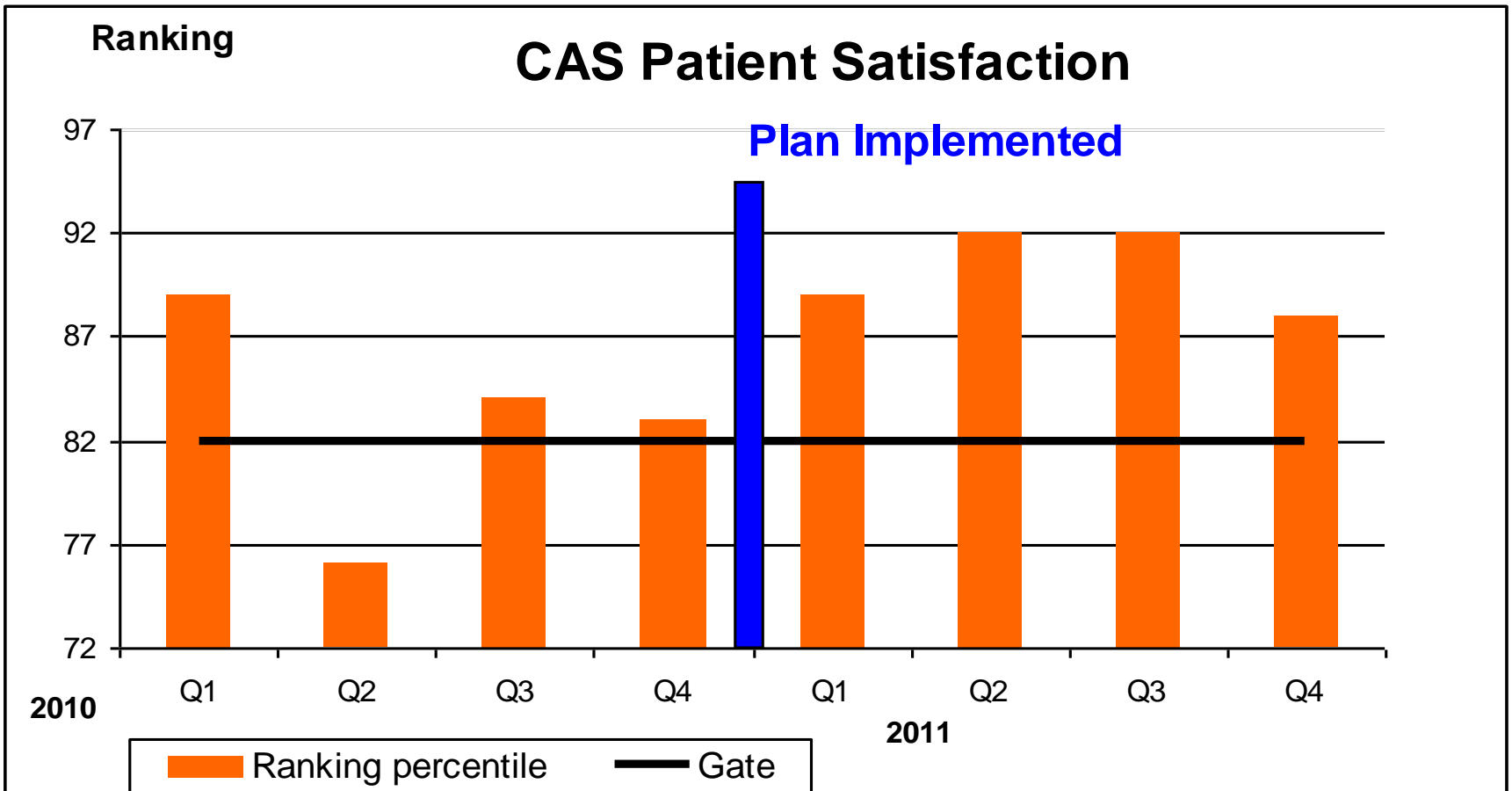
# First Year - Spending per Case

Actual Cost Compared to Baseline

## Selected Cost per Case - by Calendar Month



- Spending per Case Reduced by 10.8%
- Spending Gain = \$6,400 per FTE



- 2010 Percentile Ranking = 83
- 2011 Percentile Ranking = 89



**Scale:**

1 = Strongly disagree    2 = Disagree  
3 = Undecided  
4 = Agree    5 = Strongly agree

**Teamwork & Cooperation**

People from different departments within CAS cooperate to get the job done.

**Communication**

Communications between departments within CAS are good.

I'm getting the information I need to do a good job.

Communications between my supervisor and myself are good.

**Identity & Ownership**

I understand the CAS unit's overall goals and objectives.

I feel that my goals and the goals of the CAS unit are pretty much the same.

**Trust**

I trust management here.

| Oct 2010 | Jan 2012 | % Improvement |
|----------|----------|---------------|
|          |          |               |
| 3.75     | 4.29     | 15%           |
|          |          |               |
| 3.64     | 4.12     | 13%           |
|          |          |               |
| 4.07     | 4.35     | 7%            |
|          |          |               |
| 4.29     | 4.47     | 4%            |
|          |          |               |
| 4.42     | 4.50     | 2%            |
|          |          |               |
| 4.20     | 4.56     | 9%            |
|          |          |               |
| 3.93     | 4.18     | 6%            |



# Hackensack Hospital – 2012 Results Summary

## Gainshairng Savings and payout for 2012 Plan Year

| Unit         | Plan Effective | Number of FTEs | Primary Measures       |          | Patient Satisfaction<br>Gate Open/Closed | Payout per<br>FTE * | Total Gain         | Total Gain<br>per FTE |
|--------------|----------------|----------------|------------------------|----------|--|---------------------|--------------------|-----------------------|
|              |                |                | People<br>Productivity | Spending |  |                     |                    |                       |
| CAS          | Feb 2011       | 118            | 0.2%                   | 10.5%    | Open                                     | \$2,157             | \$727,082          | \$6,162               |
| NICU         | Jan 2012       | 84             | 7.0%                   | 14.0%    | Open                                     | \$3,248             | \$781,908          | \$9,308               |
| PEDS ER      | Jan 2012       | 56             | 3.7%                   | 5.6%     | Open                                     | \$965               | \$98,984           | \$1,768               |
| <b>Total</b> |                |                |                        |          |  |                     | <b>\$1,607,974</b> | <b>\$6,232</b>        |

## Revenue gain potential

- Due to more efficiencies & less complications, more:
  - patients
  - procedures
- Higher value procedures due to more turnover

# Summary of how gain sharing can help

1. Lower costs
2. Higher revenue
3. Reduce nurse turnover (@\$100K plus each)
4. More collaborative management structures
5. More focus on errors & infections
6. Lower surgical wait & ramping
7. Facilitate / fund useful health tech
8. Funds for more beds & health professionals
9. Higher patient satisfaction



# PROPOSAL FOR TEST

# Proposal to test gain sharing

- Hospital trial:
  - [Large metropolitan hospital](#) - single dept.
  - [Rural hospital](#) with remote communities
- Other options could be either [aged care](#) or [home care](#) (EG RDNS)
- 24 month trial:
  - Give it time to work

# Implementation steps

## Similar to case study

- Consult staff via workshops
- Provide training as necessary
- Assist with performance indicators
- Baseline on current performance
- Initiate trial
- Gather data monthly and summarise quarterly



# Online tools for rollout

1. Our online tools customised to enable lower cost rollout after trial/s
2. Consistent data collection on productivity
3. Helping people do it themselves



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## WE SEEK:

1. Funding for the training in the trials
2. Endorsement to have discussions with likely sites