

# **KAIZEN activities for improving health care and hospital management**

2015

KAIZEN Training of Trainers

# Objectives of the session

- After the session, the trainees will be able to:
  - Understand KAIZEN can be adopted to improvement quality of care in both of developing countries and developed countries
  - Understand KAIZEN can improve hospital management; financial management, stock management, information management etc.
  - Understand KAIZEN can improve health care service provision

# Word of “KAIZEN” in the world

- “KAIZEN” is now known worldwide as continuous problem solving process to improve working environment, process and conditions
- KAIZEN are adopted not only to clinical setting but also several hospital management settings in health care facilities

*Let's go and see “actual improvements in hospital management and health care services by KAIZEN*

# Virginia Mason Medical Center (U.S.A.)

- In 2002, the hospital adopted Toyota Production System philosophies and practices to health care; Virginia Mason Production System (VMPS):
  - Customer first
  - Highest quality
  - Obsession with safety
  - Highest staff satisfaction
  - A successful economic enterprise
- The hospital staff have been improving the quality of patient care with VMPS

# Actual improvement in Virginia Mason Medical Center

“Eliminating wasted nurses’ steps and increasing time to care patients”

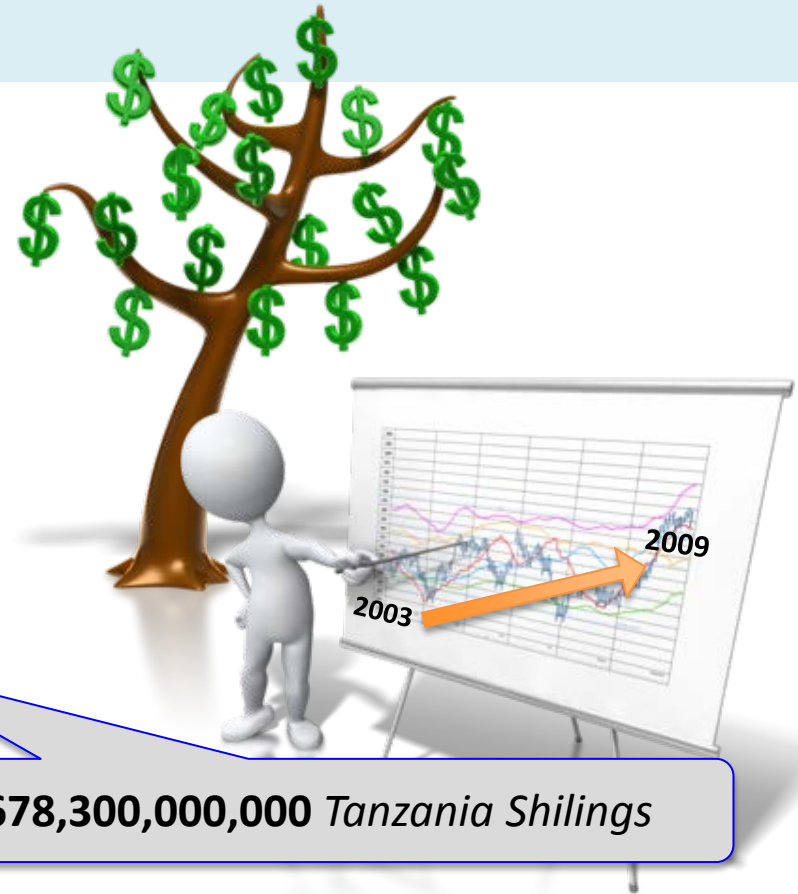
- Nurses were able to improve the flow of how they went about their day – eliminating wasted steps to get necessary medical equipment and supplies, and increasing time spent with patients
  - Steps walked per day fell from 10,000 from roughly **1,200**
  - Time in direct patient care was increased to **90%** of their time from 35%



# Actual improvement in Virginia Mason Medical Center

## “Faster revenue cycle”

- The finance department improved “Days Revenue Outstanding”
- Cash deposits improved from \$471 million in 2003 to **\$794 million** in 2009
- Increased the revenue **\$323 million**



# Actual improvement in the hospitals in Pittsburgh (U.S.A)

## Eliminate MRSA in the hospital

- TPS and KAIZEN done by the management level and service provision level cooperatively to reduce error in patient care, including the incidents of HAI
- Dropped in MRSA infection rate by approximately **70%** after TPS, KAIZEN in many areas



# Mitchell's Community Health Center (Cape Town)

“Implementing a structured triage system at a community health center”

- More than 100 un-booked patient presenting daily at the health center, most of them were requesting reissuing of his/her prescription
- By KAIZEN,
  - all patients are **assessed properly** according to the standardized protocol
  - a number of patients requiring reissuing of the prescription was **decreased by 50%**



*Reference:*

*Implementing a structured triage system at a community health centre using Kaizen*

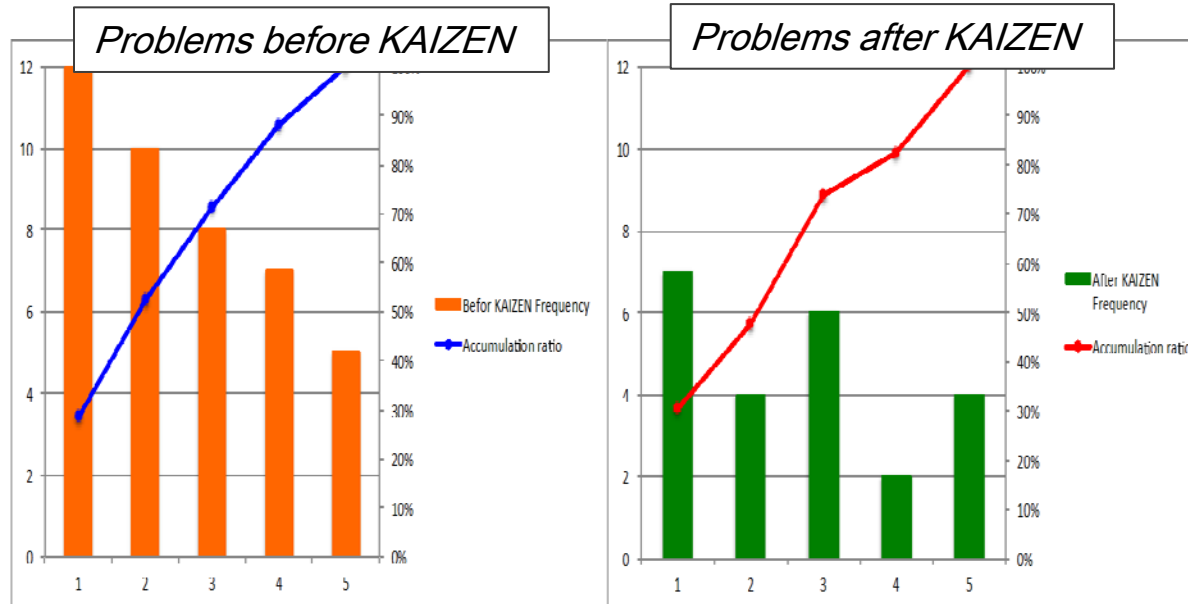


# Mbeya Zonal Referral Hospital (Tanzania)

- In 2007, 5S-KAIZEN-TQM Approach was introduced to the hospital
- The hospital has been orienting hospital staff including students and new employees on 5S-KAIZEN continuously
- Almost all areas in the hospital are practicing 5S
- High performing areas in 5S are practicing KAIZEN
- The hospital is improving own hospital/health care services by 5S and KAIZEN

# Actual improvement by KAIZEN in MZRH (1)

## “Reducing patient waiting time for the consultation at OPD”



- The frequency of the several problems was reduced from 42 to 24 **(42.9% reduction)**
- The patients' waiting time for the consultation was improved from 45 minutes to **15 minutes**

#	Contributing factors	Frequency		Reduction rate (%)
		Before	After	
1	Delay in starting consultation	12	8	33.3
2	Long break during consultation	10	4	60.0
3	Interruption by emergency cases	8	6	25.0
4	Bypass of staff	7	2	71.4
5	Long contact time	5	4	20.0
TOTAL		42	24	42.9

The KAIZEN was done by hospital staff at OPD in MZRH.



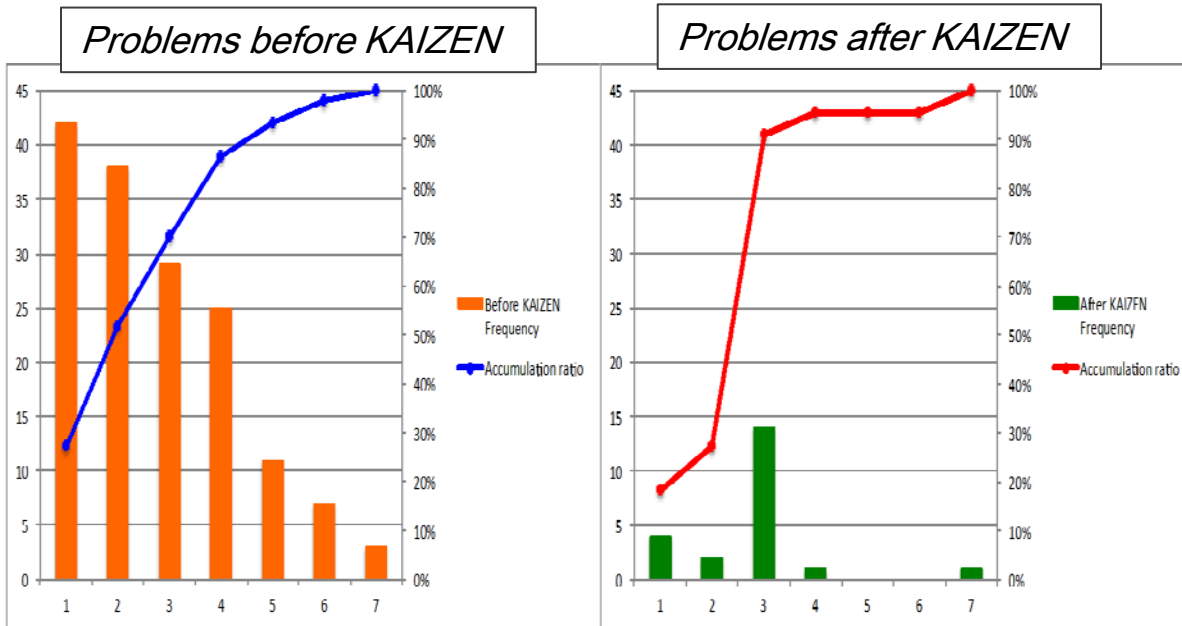
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Standardized instruction for daily staff allocation and monitoring book; Easy to allocate the staff

# Actual improvement by KAIZEN in MZRH (2)

## “Improving waste management in the hospital”



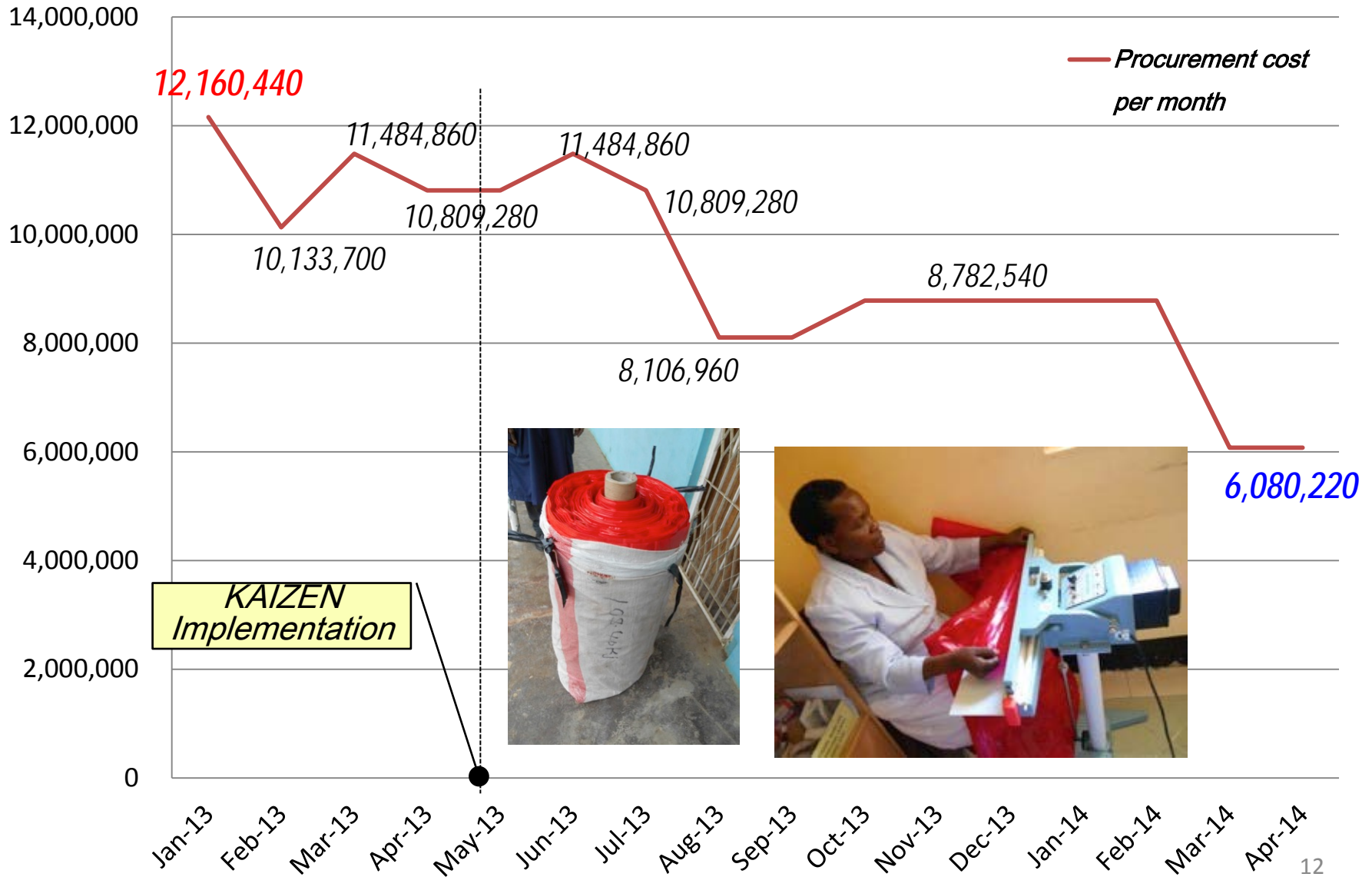
- The frequency of the improper waste management was reduced from 155 to 22. **(85.8% reduction)**
- The cost for procuring waste bin liners were also reduced (*next slides*)

#	Contributing factors	Frequency		Reduction rate (%)
		Before	After	
1	Case of bin liners in a wrong containers	42	4	90.5
2	Case of one type of bin liner missing (out of stock) at the point of waste collection	38	2	94.7
3	Case of mixing up of waste at point of collection (i.e. an item gets into wrong containers)	29	14	51.7
4	Case of waste container without a bin liner	25	1	96.0
5	Case of unauthorized waste containers/bin liners found at disposal point (incinerator)	11	0	100
6	Case of container found in a wrong area (areas which does not generate waste that match with container)	7	0	100
7	Case of mixing waste bags at the waste storage area	3	1	66.7
TOTAL		155	22	85.8



The KAIZEN was done by IPC team in MZRH.

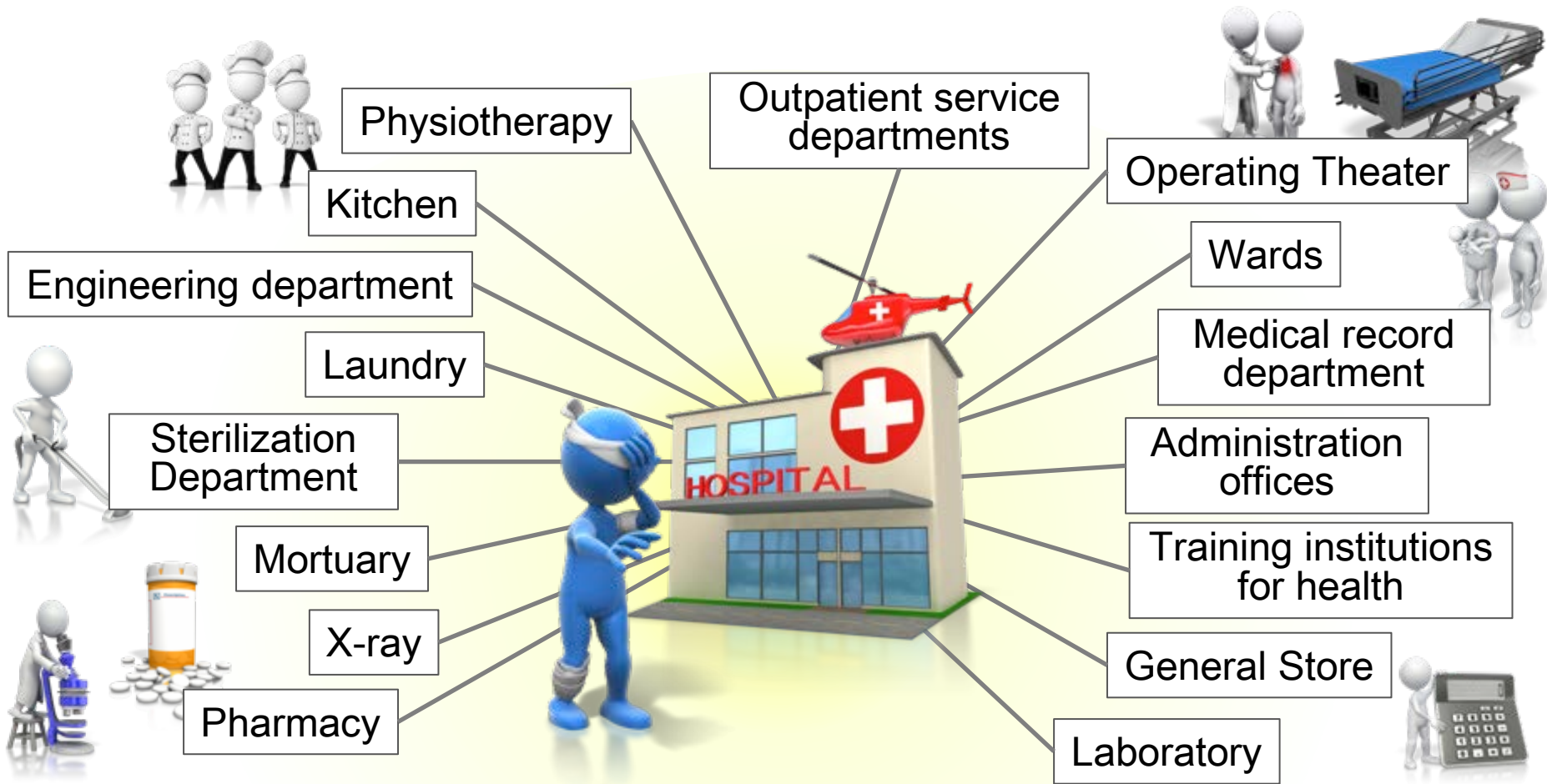
# Transition of costs for procuring waste bin liners in MZRH



# Conclusion of the session

- KAIZEN can improve and enhance several aspects of hospital management and health care services:
  - Hospital administrative management
  - Clinical administrative management
  - Quality of care
  - Infection Prevention Control
  - Patient and staff safety      etc.

# Cont.



Therefore, **KAIZEN** must be adopted to every work procedure in everywhere in RRHs

# Conclusion (2)

- Possible to **reduce costs/expenditure** by KAIZEN; eliminating “waste” in working environment and working process





*Thank you very much for listening*