Lean Management

KAIZEN Training of Trainers

KAIZEN Facilitators' Guide
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Objectives of the session

At the end of the session, trainees are able to:

1) Understand the philosophy on lean management
2) Describe the relation between 5S-KAIZEN and Lean management
3) Describe what is lean tools
4) Describe the importance of thinking and acting in lean management for health care improvement in Tanzania

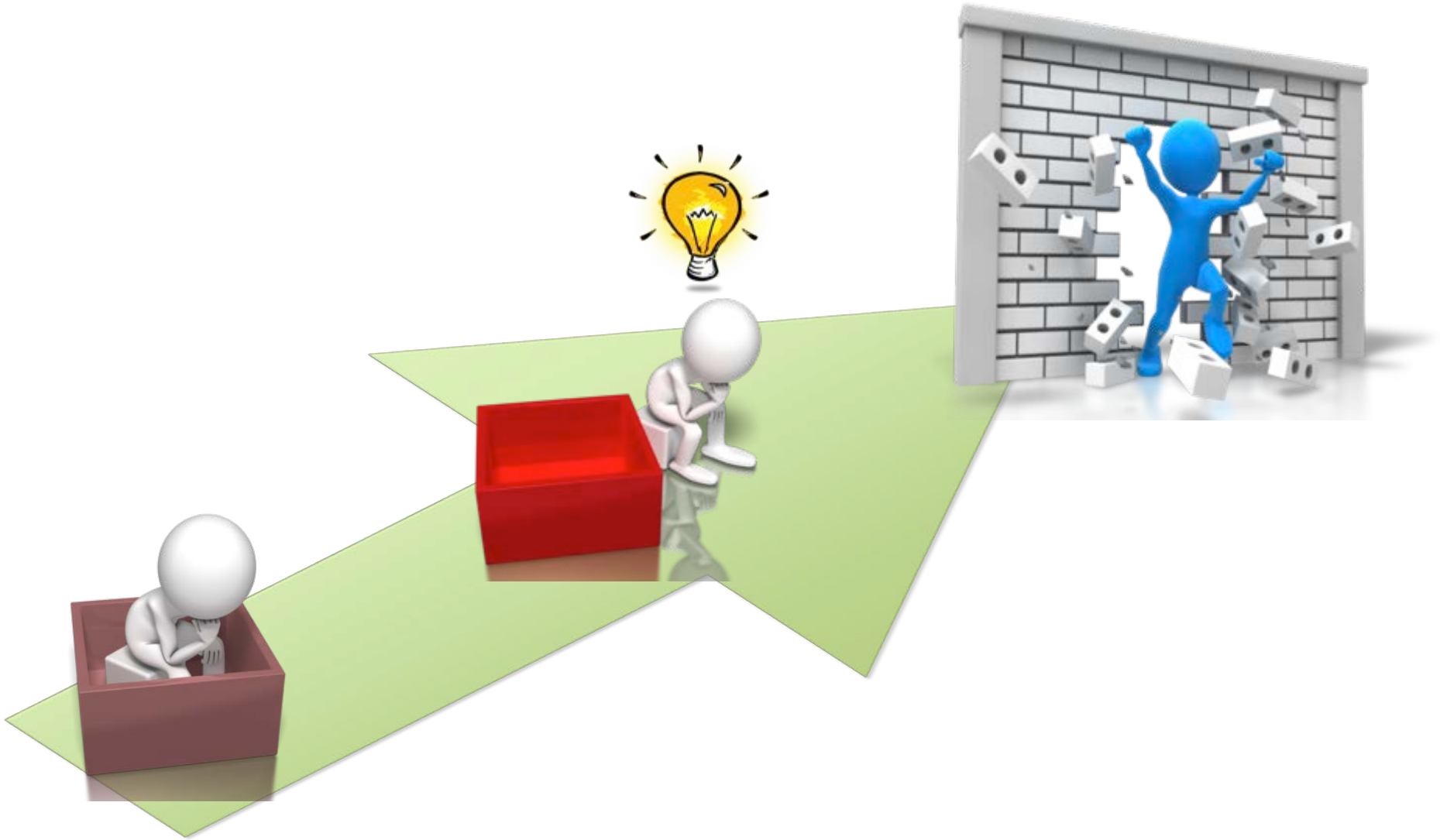
Environment surrounding health services in TZ

- Although Tanzanian health sector has made significant progress over the last several years, there are many significant challenges that still need to be addressed, including:
  - Health resources (HRH, financial, commodities…) shortage
  - Low quality of health services
  - Low reliability of the public health facility

However, we cannot stop providing health services to the community

What should we do for improvement of the situation?

Think “out of box” and break through



Answer is …

“Lean Management”

What is the difference between Kaizen and Lean?

	KAIZEN	Lean Management	Six Sigma
Origin	Japanese TQC and Toyota Production system	management philosophy developed from Toyota Production System (TPS)	set of techniques and tools for process improvement. Developed by Motorola in 1986.
Definition	A problem solving process. focuses on eliminating waste, improving productivity, and achieving sustained continual improvement in targeted activities and processes of an organization.	focused on improving process speed and quality through reduction of process wastes.	a disciplined, data-driven approach and methodology for eliminating defects
Program/activities driven by	Bottom to top (Bottom up approach)	Top to bottom (Top down approach)	Top to bottom (Top down approach)
Implementation structure	Small group activities (QC circle / QIT / WIT)	Lean Teams Problem-Solving and Self Directed Work Teams are the most common types	Black, Green, Yellow belts
Tools used for the approach	Use QC 7 tools and New QC 7 tools	Lean Tools (5S, Kanban, Andon, JIT, TPM, etc.)	DMAIC, Statistical approach
Developed/Conceptualized by	Masaaki Imai and Toyota Motors	Womack, Jones and Roos, MIT	Bill Smith at Motorola

Two ways communication and improve organization

KAIZEN approach
From **bottom to top**

Workers should have positive mindset, and trying to make workplace and services better ***("KAIZEN mind")***

Lean Management
From **top to bottom**

Managers need to know ***"Lean management"*** *to guide workers for Improvement of work flow and productivity*

What is “Lean thinking”?

Basic concept for Lean management

- A business methodology which aims to provide a new way to think about how to organize human activities to deliver more benefits to society and value to individuals while eliminating waste.

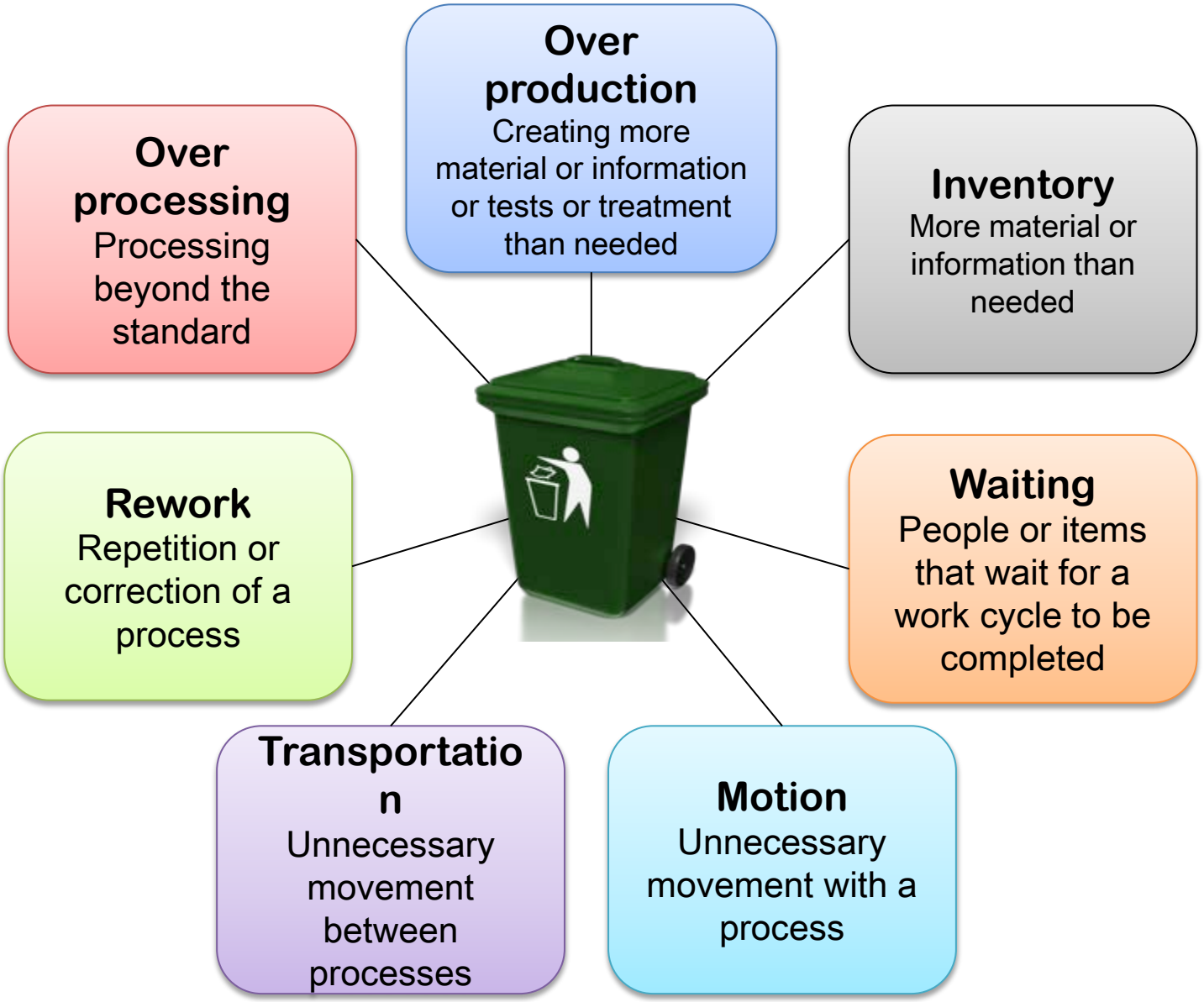
Simple definition is:

“*Becoming ‘lean’ is a process of eliminating waste with the goal of creating value.”*

How can we eliminate “wastes”?

Different types of waste in your organization

7 types of wastes in work place

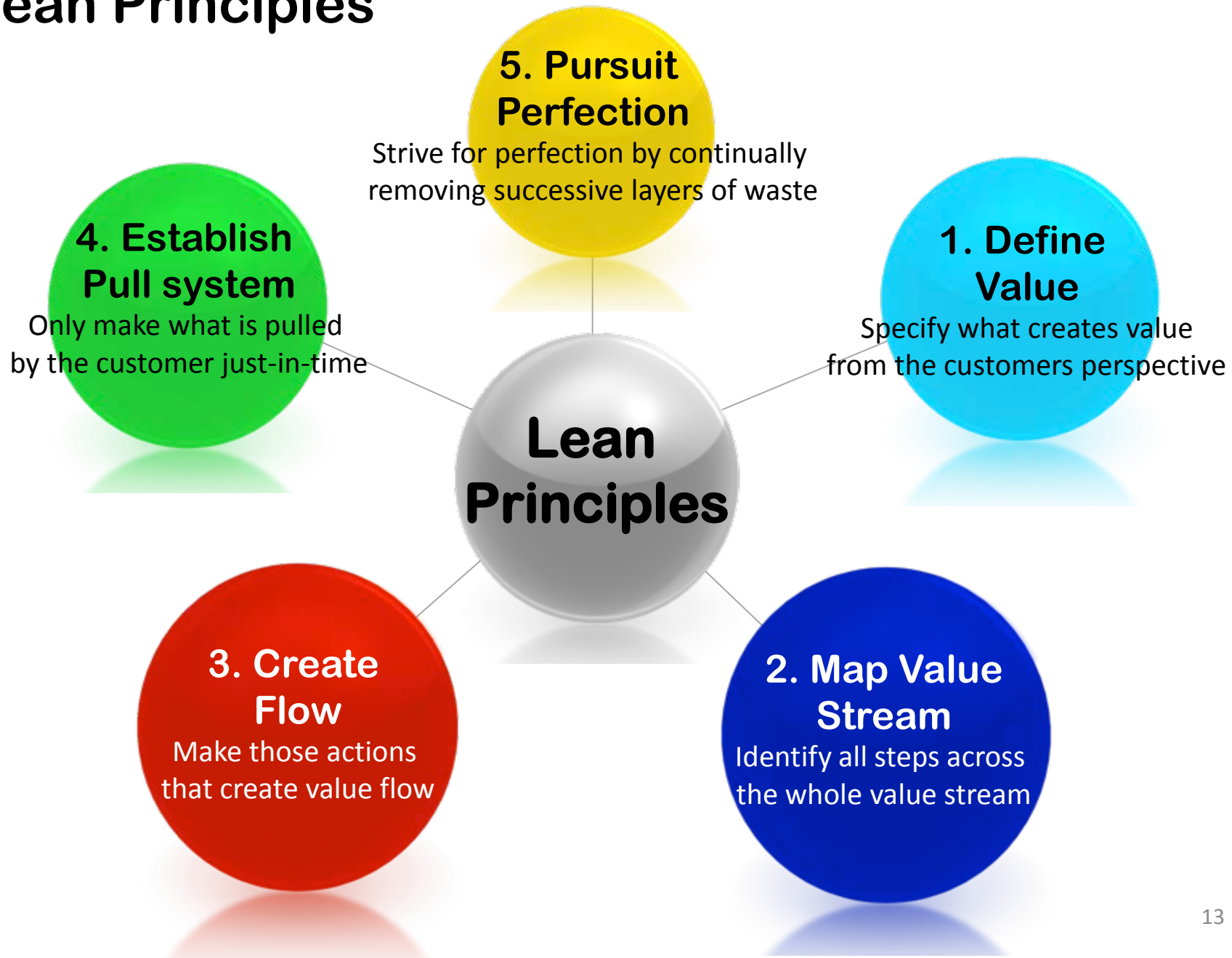


“Muri”, “Mura”, “Muda”

Muri Unreasonable burden	Any activity asking unreasonable stress or effort from personnel, material or equipment. In short: **OVERBURDEN** For people, Muri means: a too heavy mental- or physical burden. For machinery Muri means: expecting a machine to do more than it is capable of- or has been designed to do.
Mura Un-level workloads	Any variation leading to unbalanced situations. In short: **UNEVENNESS**, inconsistent, irregular. Mura exists when workflow is out of balance and workload is inconsistent and not incompliance with the standard.
Muda Any forms of Waste in the process	any activity in your process that does not add value. MUDA is not creating value for the customer. In short: **WASTE** Type I muda: Non-value-added tasks which seam to be essential. Business conditions need to be changed to eliminate this type of waste. Type II muda: Non-value-added tasks which can be eliminated immediately.

What should be used for elimination of wastes?

Lean Principles



Lean Principles
Mental Model for lean thinking

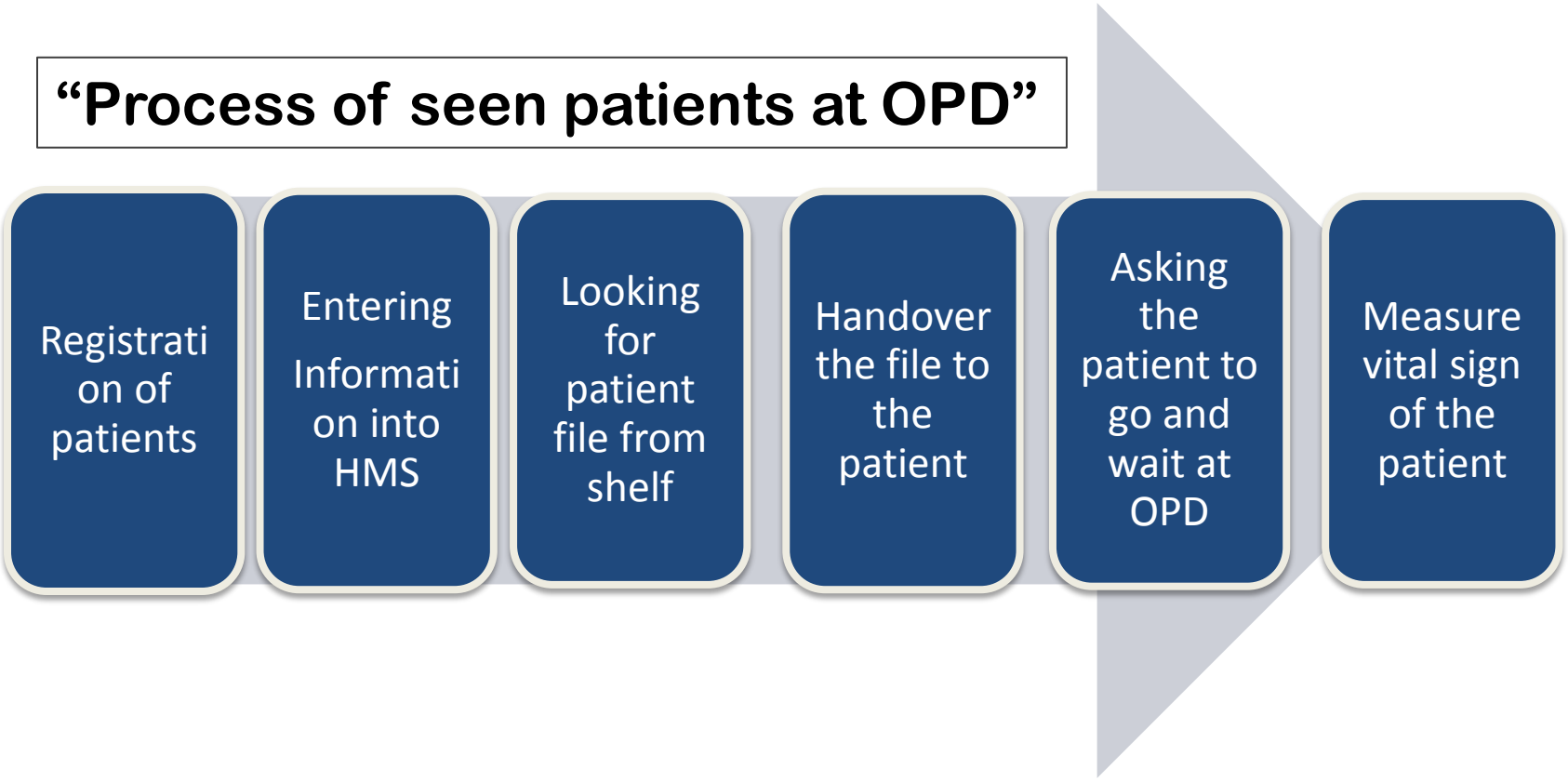
Lean Principles		What should be done
1)	**Define Value**	Define value from a patient's perspective. Try to understand their health and non-health expectations. How patients' experience could be improved.
2)	**Map Value Stream**	Evaluate how all the steps of a process or procedure to provide services in the health facility. Then, eliminate any steps that do not contribute to performance, productivity or safety of the health facility.
3)	**Create Flow**	Eliminate waste between steps of a process and create smooth workflow for high efficiency
4)	**Establish Pull system**	Allow the patient to receive or request services if and when need.
5)	**Pursuit Perfection**	Continuously adapt to an ever-changing environment and patients' needs in order to deliver high quality of health services.

An example of Define Value

Long waiting time for consultancy?

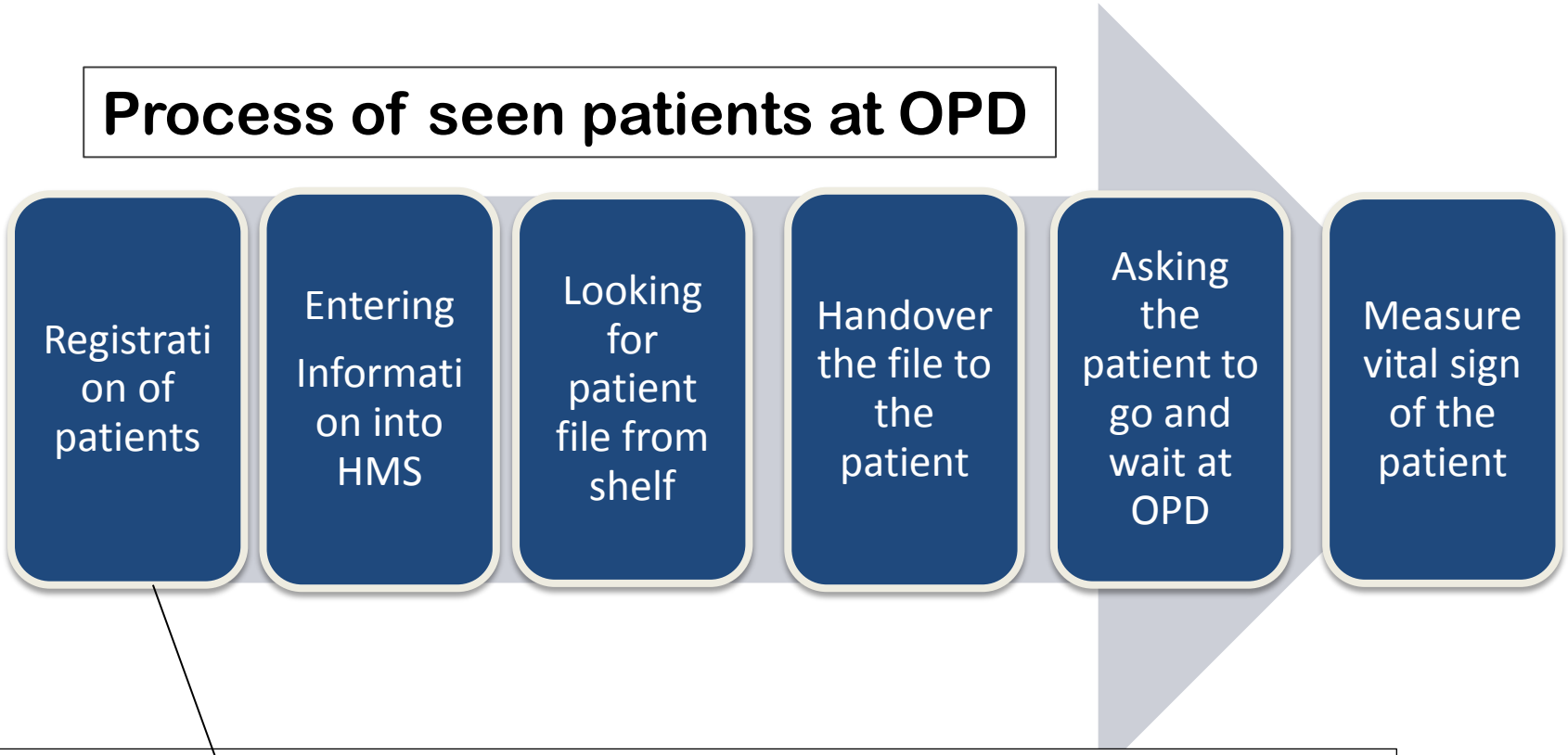
Good communication and explanation of treatment?

An example of map value stream



Are all the steps necessary ?
Are there any steps can be eliminated or change for better?

An example of create “flow”



Registration can be divided into 2 lanes:

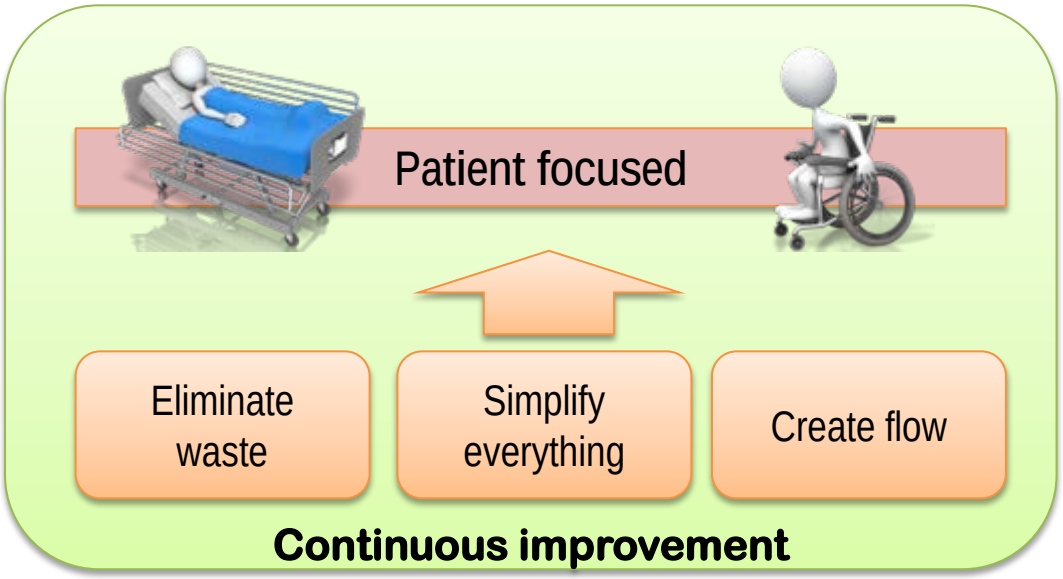
1) Registration of new patients, and
2) Registration of returning patients for smooth registration

How can we apply Lean Principles?

Use “Lean Tools”

- Lean tools are essential for accelerating the practice of lean management.
- There are over 50 lean tools that organization can adopt for lean management
- Lean tools can be selected based on the characteristic of organization and services provided
- It is important to know how to use each lean tool

Possible to obtain lots of lean tools from:
http://www.systems2win.com/solutions/lean.htm



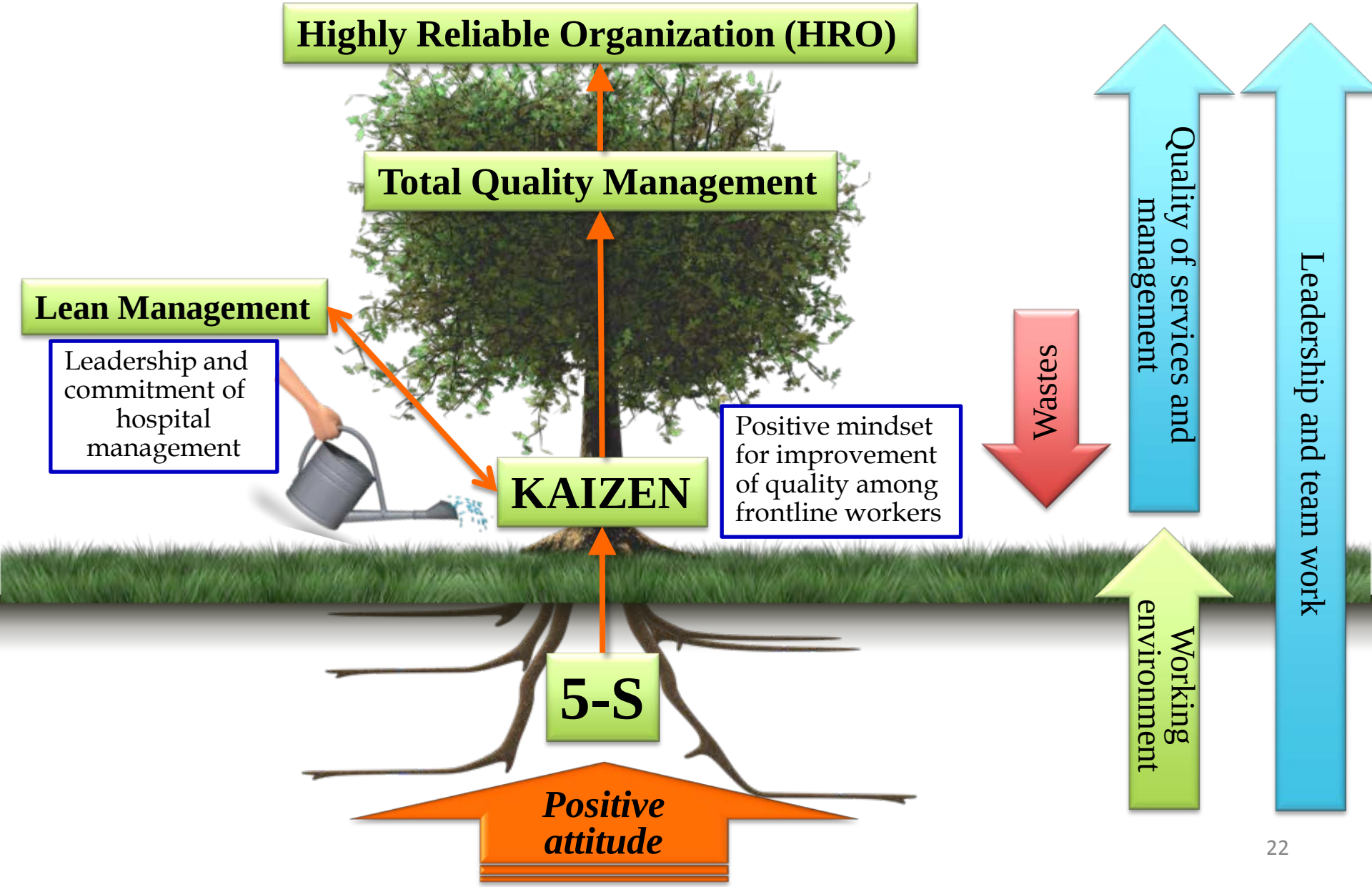
Pull system (Kanban)	Quick –set up	Just In Time
Mistake-Proofing (Poka-yoke)	Point of use storage	Batch size reduction
Standardized work	Takt Time	Problem solving process (KAIZEN process)
Total Productive Maintenance	Visual control	Stopping the line
5S approach	Value Stream Mapping	Workplace layout

Lean tools

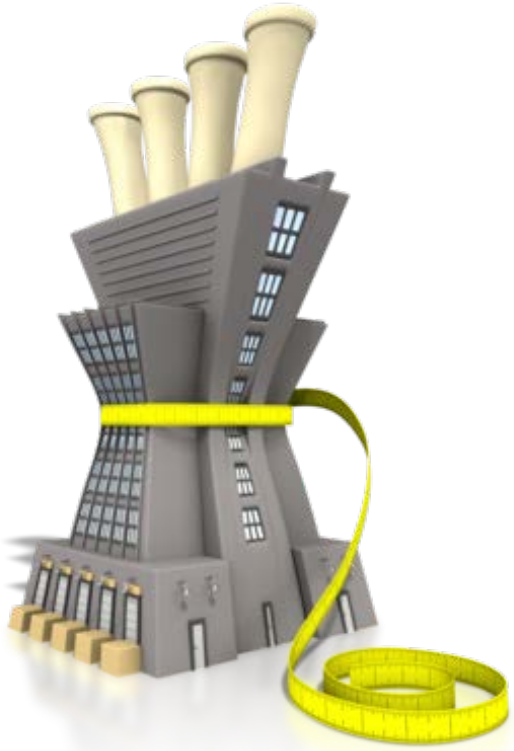
Note that tools in the blue box are taught in 5S training

Wrap up: Lean process

Lean management and 5S-KAIZEN-TQM Approach



Achieve “Lean” with “KAIZEN”



Continues Quality Improvement and open quality spiral concepts achieve “Lean management”

Thank you for listening !

any question?