

Small Changes Made a Big Difference – Application of Lean Management on Central Phlebotomy Services



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Acknowledgement

- ▶ **Ms. Chan Yuet Kwai (CGMN, KEC)**
- ▶ **Ms. Koon Sui Hing, TSA (CR), PS, NSD, UCH**
- ▶ **Phlebotomy Team, Nursing Services Division, United Christian Hospital**
- ▶ **All Ward Managers of UCH**

Background

- ▶ Centralized phlebotomy services had been established since September 2007.
- ▶ Original team with 10 phlebotomists was expanded to 24 phlebotomists.
- ▶ Providing 24-hour service for 36 in-patient wards.

Background

▶ Roles of phlebotomist

Normal blood taking



Blood culture Collection



Neonatal heel-prick



Intravenous cannulation

Background

- ▶ Expanded scope of service
- ▶ Phlebotomists required to **work in different environmental settings** in different wards.
- ▶ Phlebotomists very **frustrated in spending lots of time to find blood taking materials.**

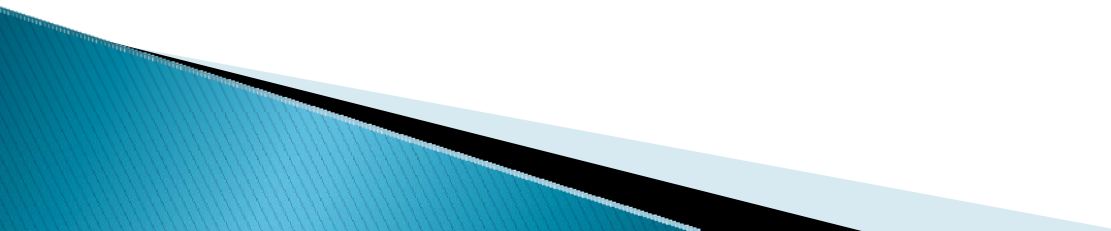
Think more · **small changes**
may do better !!!



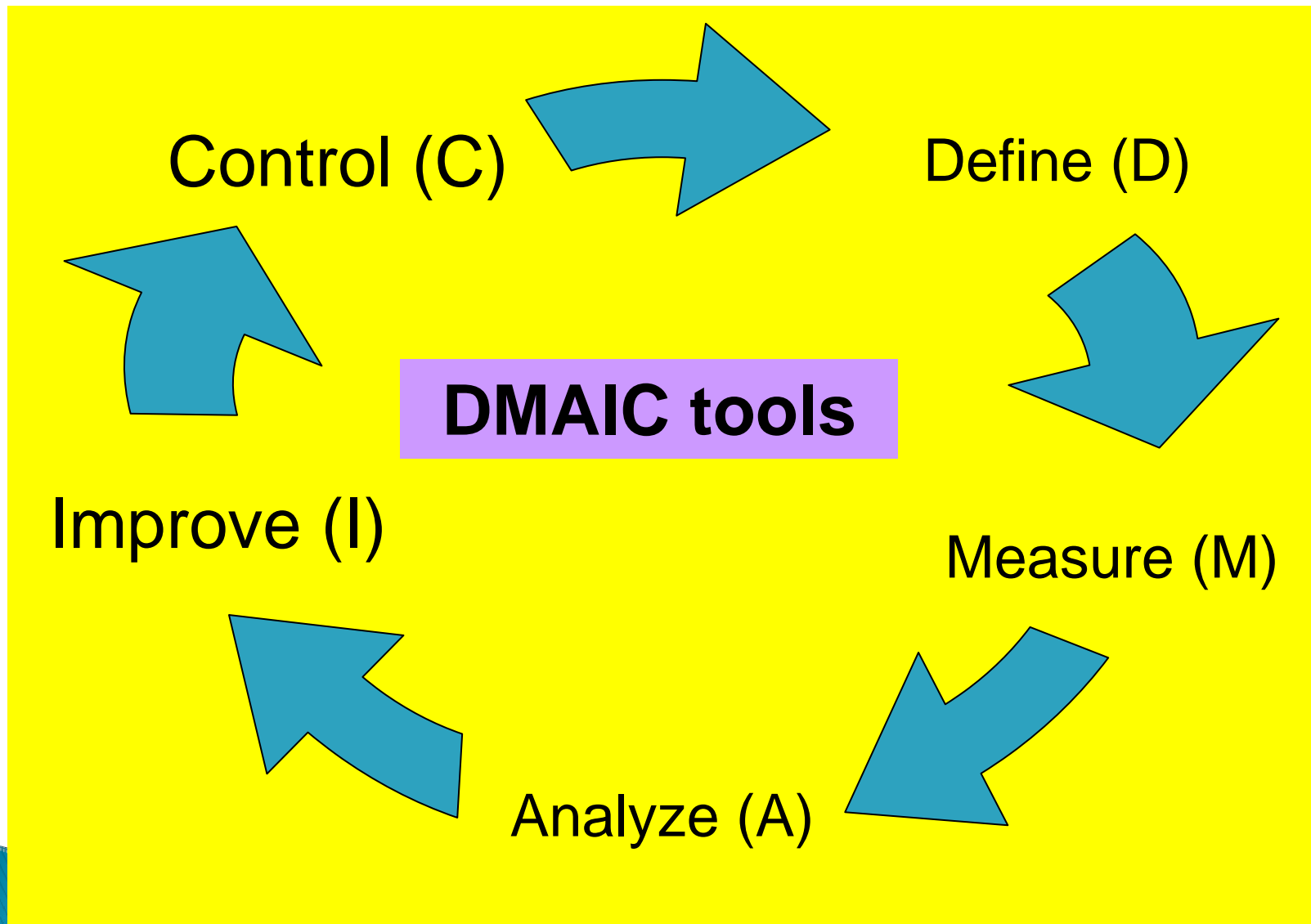
Project for standardization of blood taking trolley in 36 in-patient wards

- ▶ It was initiated by central phlebotomy team since December 2007

Objectives:

- ▶ **Minimizing manpower wastage** for searching blood taking materials
 - ▶ **Improving workflow of blood taking** in phlebotomy team
 - ▶ **Improving phlebotomist's morale and productivity.**
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Adopting Lean health care management



Define (D):

Define and collaborate with the below persons:

- 1) Subject officer – identify **few phlebotomists** for responsible in the project.
- 2) Stake-holders (36 ward managers) – seek for their **consensus** to set up a standardized blood taking trolley in the ward.

Measure (M):

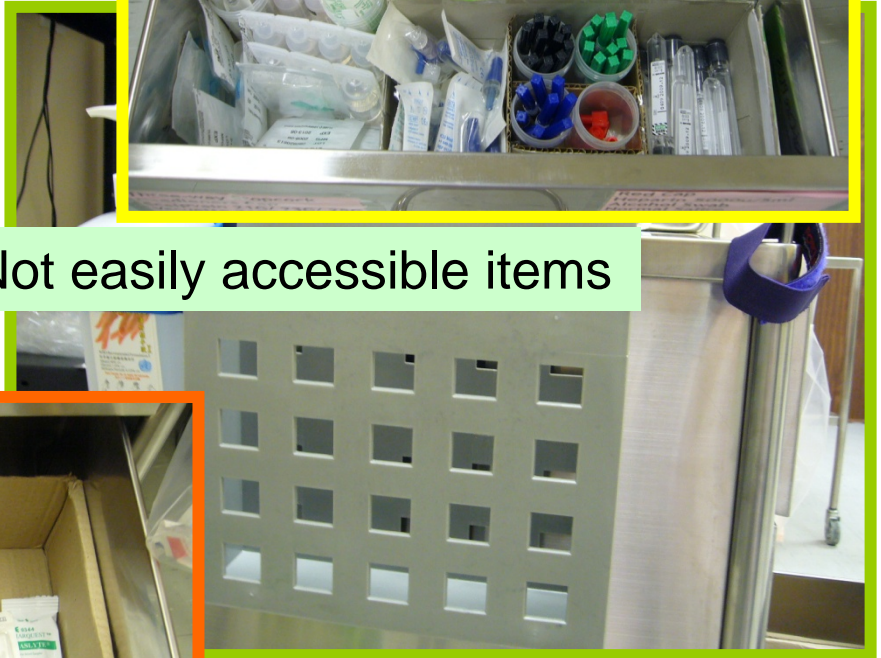
Identify the non value-added activities.

1) Repeat spending time to find needed items

Un-organized items putting together in a same drawer



Not easily accessible items



Insufficient amount of items



Measure (M):

2) Lack of Occupational Safety Health (OSH) concern – bending of back to take frequently used items



Analyze (A):

Adopt 5S to categorize and stratify the blood taking material items according to necessity, number, uniqueness and accessibility.

For normal blood taking



For blood culture collection



Application of 5S (五常法)

Structurise	Consideration of the necessity items, storage amount and ensure the accessibility and uniqueness
Systematise	Categorize the blood taking material items. Stratify the blood taking material items according to the consumption frequency.
Standardise	Developing illustrative guide for setting up
Sanitise	Set up routine cleaning
Self-discipline	A daily topping up system

Example (1)

- ▶ Organize and categorize the items
- ▶ One is best (單一便是最好)
- ▶ Correct labeling (名) and designated area for all items (家)



Example (2)

▶ Stratification Management (分層管理)

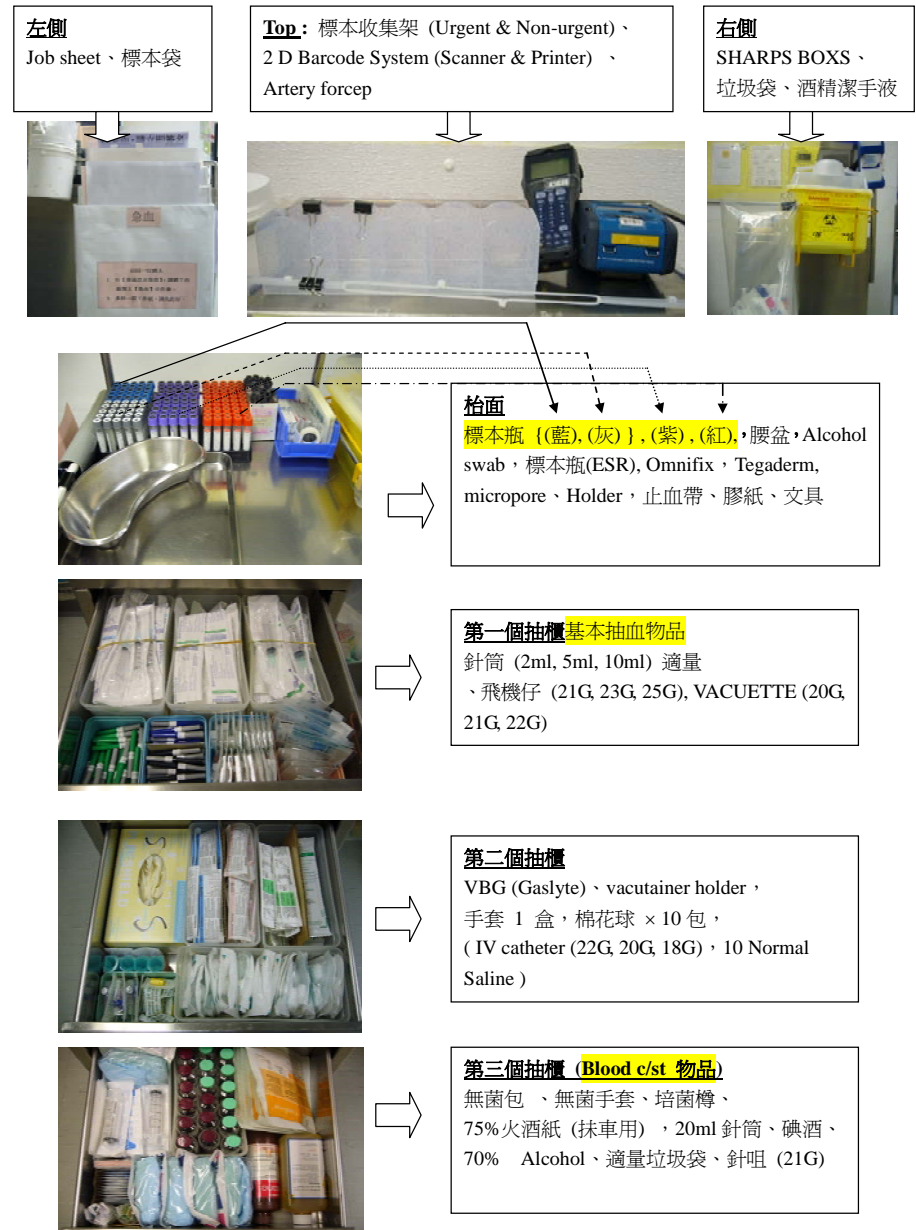
- Divided into top、middle、lower level of consumption
- High consumption items put on the top drawer or easy to access drawer / table



****每天 D 及 A 更同事上班時需檢查所需物品是否齊備，下班前清理用過的物品及垃圾。用 70%酒精清潔抽血車及添加物品。使用抽血車後，必須放回該病室的原本(適當)位置。****

Improve (I):

Develop illustrative guide for setting up of the blood taking trolley.



Control (C):

Set up topping-up and cleaning routine for daily follow-up.

- ▶ Daily topping up
- ▶ Daily cleansing
- ▶ Weekly checking of expiry date

Results – Big Difference

- 1) **Minimized manpower wastage** for searching materials of blood taking.

10 minutes saved	1 blood culture collection
300 man-hours saved / month	1800 blood culture collection / month

Results – **Big Difference**

- 2) **Improved work flow** of blood taking, one stop for searching blood taking materials was designed.
- 3) **Improved staff morale, increased productivity and efficiency.**

Sustain

- ▶ **Continuous improvement** – encourage feedback from phlebotomists.
- ▶ **Further application** of Lean Management in other area of our service.
- ▶ **Recognition of phlebotomists' effort** – creating a sharing platform in meeting.

Nursing Supporting Staff Committee Meeting for Sharing



We did it !

Conclusion

Benefit:

- ▶ **Reduced the wastage of manpower** in searching blood taking materials in different ward setting.
- ▶ **Shorten the time** for each blood taking procedure and work smoothly.

Thank you