A Study on the Structure of Educational Content for Healthcare Quality and Safety

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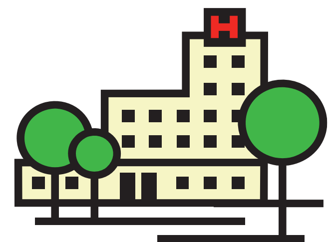
1. Introduction

- In order to improve quality of healthcare ・・・
  Introduce Quality Management System (QMS)

- Education and Training for QMS

  Acquire knowledge and master skills for
  - establishing QMS
  - healthcare safety



Not establish education system for QMS

1. Introduction

Purpose

Propose educational content for QMS and healthcare safety

Table.1 Educational contents for QMS -including healthcare safety- (partial)

Classifi-cation	First hierarchy	Second hierarchy	Detailed contents	Target people			
				staffs	managers	Commi-ttee	manager of QMS

Chapter 3

Process for developing table 1 (6 steps)

Chapter 4

Carry out education by utilizing table 1

2. Investigate the current situation and Consider the requirements

Current problems in hospitals

(1) Education for QMS is not frequently carried out

(2) Education is not continuous

(3) Education for staffs except for newcomers is not frequently carried out

The requirements of the table of educational contents

(a) Contents should cover necessary knowledge and skills for QMS

(b) Contents can be utilized when any hospital plans education

(c) Contents for all staffs need to be made clear

3 rocess for developing educational contents

Step nvestigate the tasks of QMS and safety manager

Step 2 Consider classification and first hierarchy

Step 3 efine the target people

Step Consider the role of each target people

Step evelop second hierarchy and detailed contents

Step Consider the relations between contents and people

Classifi-cation	First hierarchy	Second hierarchy	Detailed contents	Target people			
				staffs	managers	Commi-ttee	manager of QMS
Each stage of PDCA cycle	Prevent the recurrence of the accidents	Reports about incidents	Purpose of reports	●	●	●	●
			Method to write reports	●	●	●	●
			Method to turn in reports	●	●	●	●
		Method of incidents analysis	RCA		●	●	●
			MedicalSAFER			●	●
Rotating PDCA cycle	Document Management System	Significance of document system	Significance of documentation	●	●	●	●
			Significance of document system	●	●	●	●
		Type of document	Regulations, manual	●	●	●	●

3. Process for developing educational contents

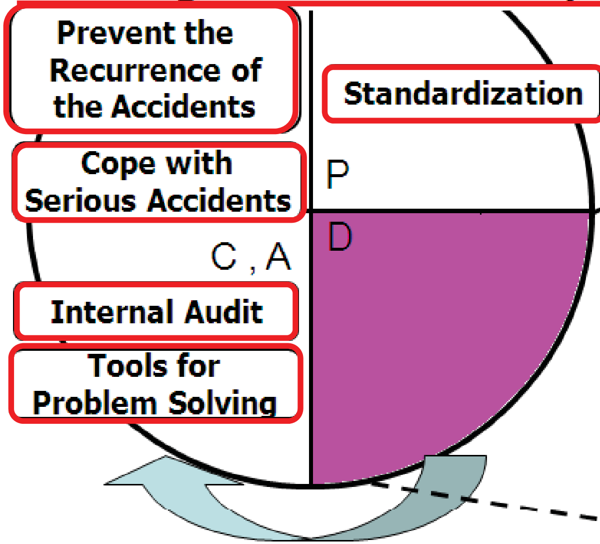
Classifi-cation	First hierarchy	Second hierarchy	Detailed contents	Target people			
				staffs	managers	Commi-ttee	manager of QMS
Each stage of PDCA cycle	Prevent the recurrence of the accidents	Reports about incidents	Purpose of reports	●	●	●	●
			Method to write reports	●	●	●	●
			Method to turn in reports	●	●	●	●
		Method of incidents analysis	RCA		●	●	●
			MedicalSAFER			●	●

Step 1 : Investigate the tasks of QMS and safety manager

Step 2 : Consider classification and first hierarchy
based on investigated tasks in Step 1

⇒ Classification : 4 types
First hierarchy : 19 contents

·Significance | Healthcare Quality and Safety | Fundamental Concept



·Offering Safety Healthcare Service

Working Method	Knowledge
Medical Devices and Medicines	Law of Medical Care
Information Management	Lawsuit and Insurance
Safety Action	
Working Method for Preventing Incidents	

·Rotating PDCA Rotation Cycle

Document Management System | Committee | IT and Healthcare Safety

System for Healthcare Safety | System for Daily Management | Policy Management

rocess for developing ed cational contents

Step : efine the target people

Step 4 : Consider the role of each target people

he ed cation hich each staff sho ld take is different

⇒ ivided the target people ith regard to the role of QMS activities

Second hierarchy	Detailed contents	Target people			
		general staffs	managers of department	committee of QMS	manager of QMS
eports bout cidents	Purpose of reports	●	●	●	●
	Method to write reports	●	●	●	●
	Method to turn in reports	●	●	●	●
ethod of ncidents nalysis	RCA		●	●	●
	MedicalSAFER			●	●

3. Process for developing educational contents

Step 5 : Develop second hierarchy and detailed contents

Classifi-cation	First hierarchy	Second hierarchy	Detailed contents	Target people			
				staffs	managers	Commi-ttee	manager of QMS
Each stage of PDCA cy	Prevent recurrence	R… abou… in…nts	Purp… f reports	●	●	●	●
			Meth… o write reports	●	●	●	●
			Met… to turn in reports	●	●	●	●
		Method of	P…M	●	●	●	●
			RCA		●	●	●
Rota PD cy							

References

- The literature of QMS and healthcare safety
- The textbook for quality control and healthcare safety
- The result of analyzing the incidents

3. Process for developing educational contents

Step 6 : Consider the relations between contents and people referring to the role of each target people

First hierarchy	Second hierarchy	Detailed contents	Target people			
			staffs	managers	Commi-ttee	manager of QMS
Prevent the recurrence of the accidents	Reports about incidents	Purpose of reports	●	●	●	●
		Method to write reports	●	●	●	●
		Method to turn in reports	●	●	●	●
	Method of incidents analysis	POAM	●	●	●	●
		RCA		●	●	●
		MedicalSAFER			●	●
	Method of countermeasures	Type of countermeasures	●	●	●	●
		Error Proofing	●	●	●	●
		….				
Document Management System	Significance of document system	Significance of documentation	●	●	●	●
		Significance of document system	●	●	●	●
	Type of document	Regulations, manual	●	●	●	●
	Concrete method of document management system	Making a document		●	●	●
		Approval of a document		●	●	●
		….				
….	….	….				

3. Process for developing educational contents

Table.1 Educational contents for QMS -including healthcare safety- (partial)

Classification	First hierarchy	Second hierarchy	Detailed contents	Target people: staffs	managers	Committee	manager of QMS
Each stage of PDCA cycle	Prevent the recurrence of the accidents	Reports about incidents	Purpose of reports	●	●	●	●
			Method to write reports	●	●	●	●
			Method to turn in reports	●	●	●	●
		Method of incidents analysis	RCA		●	●	●
			Medical SAFER			●	●
Rotating PDCA cycle	Document Management System	Significance of document system	Significance of documentation	●	●	●	●
			Significance of document system	●	●	●	●
		Type of document	Regulations, manual	●	●	●	●
		Concrete method of document management system	Making a document		●	●	●
			Approval of a document		●	●	●
			....				
....	....	....	....				
Offering safety healthcare service	Medical devices and medicines	Significance	Significance of handling	●	●	●	●
		Handle medical devices	Type of medical devices (Ex. Risky devices and so on)	●	●	●	●
			Method to handle medical devices in a hospital ward	●	●	●	●
			Method to dump medical devices				●

19 contents | 74 contents | 241 contents

4. Verification

4.1 Confirm that proposed contents cover all necessary contents

- We asked 5 medical staffs in hospitals introduced QMS to discuss suitability of proposed contents

Table.2 The number and the details of indications for proposed contents

Indication category	Number	Details of indications
Addition	29	Anti-cancer drug should be included in the content of medicines.
		・・・
Deletion	1	The content of infection control is not necessary.
Correction	7	The content of communication would be better divided between communication for medical staff and communication for patients.
		・・・

Only addition of detailed contents, altered the wording / Correction of the arrangement, Added necessary contents.

Fulfill requirement (a)

. erification

a le. ducation lan in hos ital A

Category	Educational content	Target Object	Date
Step1	1. KYT (Hazard Prediction Training)	Indispensable people are new comers and managers. Optional people are others.	18, 19, 25, 26 Jun. 2009 11, 12, 25, 26 Jun. 2010
	2. Reports about incidents		9, 10, 23, 24 Jul 2009 1, 3, 22, 23 Jul 2010
	3. Method of incidents analysis (POAM)		20, 21 Aug. 2009 26, 28 Aug. 2010
	4. Method of taking countermeasures (Error-Proof)		27, 28 Aug. 2009 16, 17 Sep. 2010
Step2	1. Standardization (Process Flow Chart)	People who received all education of Step1.	7, 8, Dec. 2010
	2. Method of incidents analysis (POAM)		17, 18 Dec. 2010
	3. Document Management System		13, 14 Jan. 2011

- QMS manager in hospital A chose the contents

First hierarchy	Second hierarchy	etailed contents	Target people: staffs	Target people: managers	Target people: Committee	Target people: manager of QMS
Prevent the recurrence of the accidents	Reports about incidents	Purpose of reports	●	●	●	●
		Method to write reports	●	●	●	●
		Method to turn in reports	●	●	●	●
	Method of incidents analysis	POAM	●	●	●	●
		RCA		●	●	●
		Medical SAFER			●	●
	Method of countermeasures	Type of countermeasures	●	●	●	●
		Error Proofing	●	●	●	●
		....				

4. Verification

4.2 Carry out education by utilizing table 1

Table.2 Education plan in hospital A

Category	Educational content	Target Object
Step1	1. KYT (Hazard Prediction Training)	Indispensable people are new comers and managers. Optional people are others.
	2. Reports about incidents	
	3. Method of incidents analysis (POAM)	
	4. Method of taking countermeasures (Error-Proof)	
Step2	1. Standardization (Process Flow Chart)	People who received all education of Step1.
	2. Method of incidents analysis (POAM)	
	3. Document Management System	

A way of education

- 1 hour per educational content
- Same content was carried out 4 times
- Exercise based on actual incident reports

4 erification

4.2 Carry out education by utilizing table 1

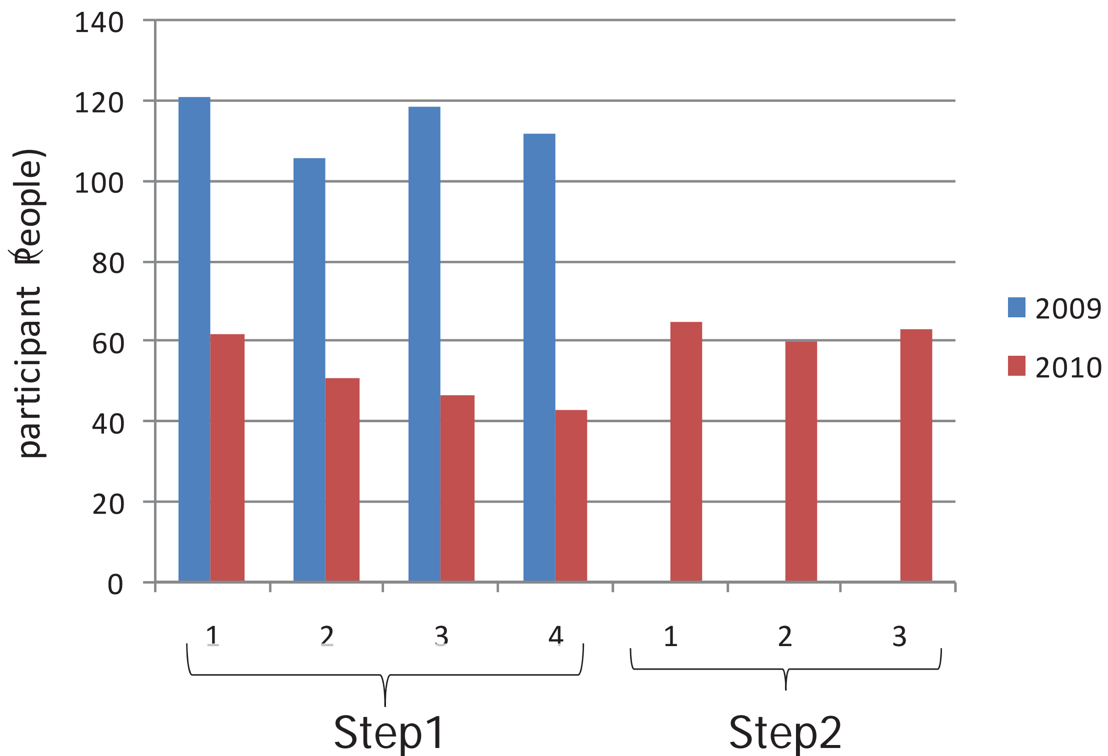


Fig. A The number of participant of education in hospital A

4. Verification

4.2 Carry out education by utilizing table 1

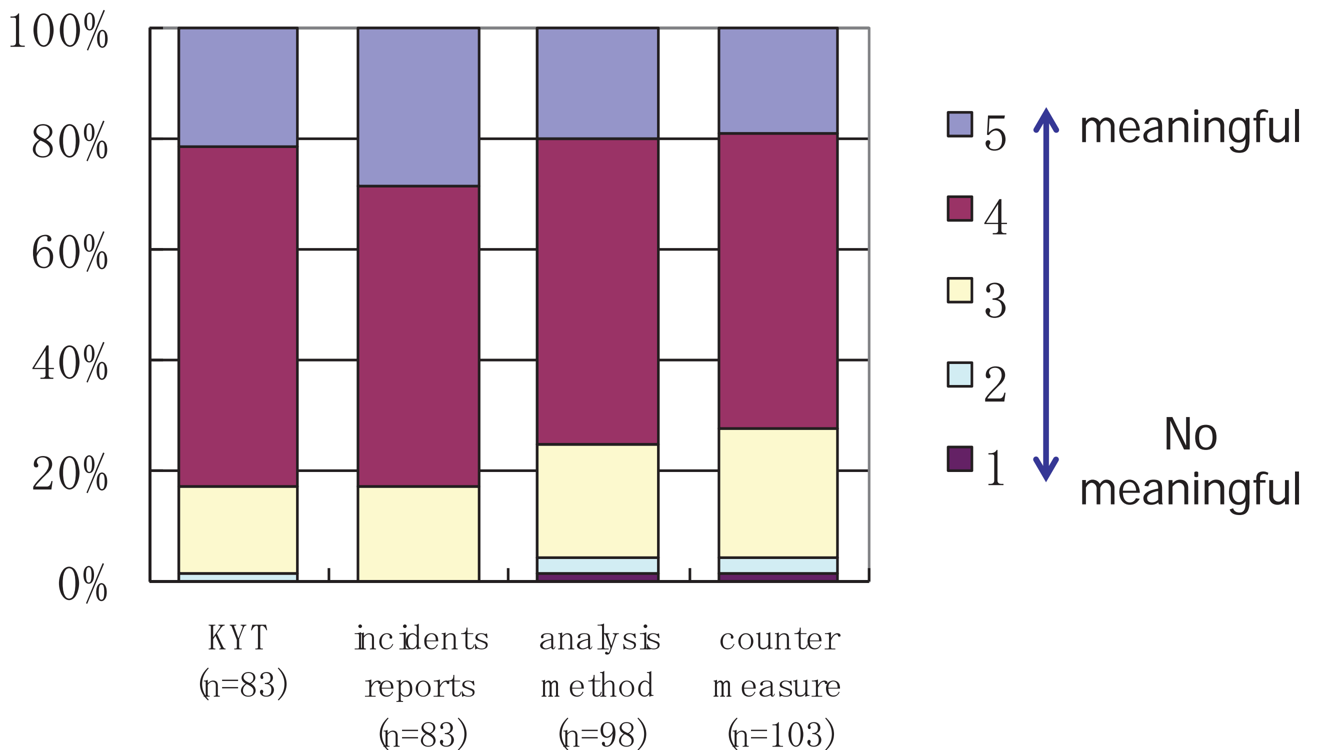


Fig. 2 The result of a questionnaire about a meaningful of each education of Step1

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Table.1 ducation contents for S including healthcare safet

Classifi-cation	First hierarchy	Second hierarchy	Detailed contents	Target people: staffs	managers	Commi-ttee	manager of QMS
Each stage of PDCA cycle	Prevent the recurrence of the accidents	R ports about inc	Purpose of reports	●	●	●	●
			Method to write reports		●	●	●
			Method to turn in reports	●	●	●	●
		Met incide	RCA		●	●	●
			dicalSAF			●	●
Ro PI c							
Of sa heal se							

・ neces

Fulfill requirement c

roposed first hierarch second hierarch and detailed contents in order

⇒ ossible to choose contents according to the state of S in each hospital

Fulfill requirement b

. onclusion and Future ssues

onclusion

e considered educational contents for S

e carried out the education b utili ing the contents

Future ssues

1 erif the appropriateness of the relationships bet een educational contents and target people

2 onsider the method to e aluate the effect of education

eferences

1. The inistr of ealth abor and elfare in apan 2 guidelines for a manager of healthcare safet http .mhl .go. p
2. oshinori i u a *et al.* 2 ualit anagement S stem for ealthcare Ser ice guidelines for S apanese Standards ssociation
. ommittee for ducation of Safet anager 2 Te t for safet manager in hospital apanese Standards ssociation
. Shuhei ida *et al.* 2 1 Te t for safet manager in hospital a ne edition apanese Standards ssociation
. Shuhei ida *et al.* 2 dictionar of healthcare qualit terms apanese Standards ssociation