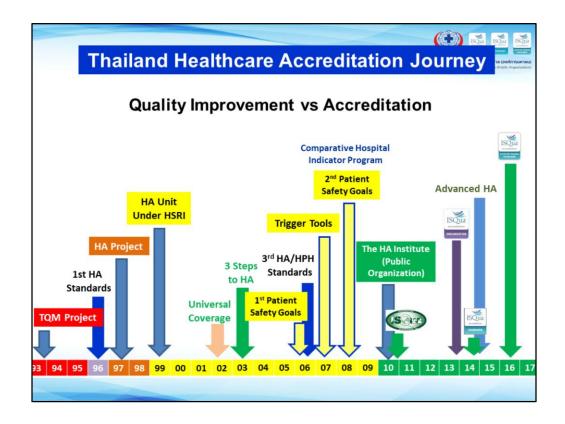


Transformation for Quality & Safety in Healthcare

Anuwat Supachutikul, M.D.
Former CEO, Healthcare Accreditation Institute, Thailand
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This complex diagram is just a brief introduction of myself. Starting with quality improvement and use accreditation as a mechanism to drive quality improvement. We have learnt that a small group of people with passion of quality can make quite a big change to the country. The issue is not accreditation or not accreditation, but what should be the mechanism to drive quality & safety movement in your country.



I think there is no need to say why quality and safety is so important. The question is 'Do we need to be in a hurry about quality and safety?' For myself, I think we was too slow to move. We can not catch up with the expectation of the people and the complexity of the health system. We can not build up immunity to our health system early enough.

When I attended the preconference workshop this morning, I found that you are facing the same problems, public awareness and public demand is increasing. How can we make a compensation for medical errors separated from the investigation of that error so that we have freedom to investigate and improve our system without fearing that the results will be used for punishment. It's not the decision whether a practitioner doing right or wrong thing, which will move us away from looking at opportunity for system improvement. How can we apply the concept of just culture in considering medical errors?

The second question is 'What should be an incentive to make change?' Should we make it compulsory, or should we use financial incentive, or should we let it to the public demand, or should we use our inner motivation and inspiration? You have to answer yourselves.

Topics

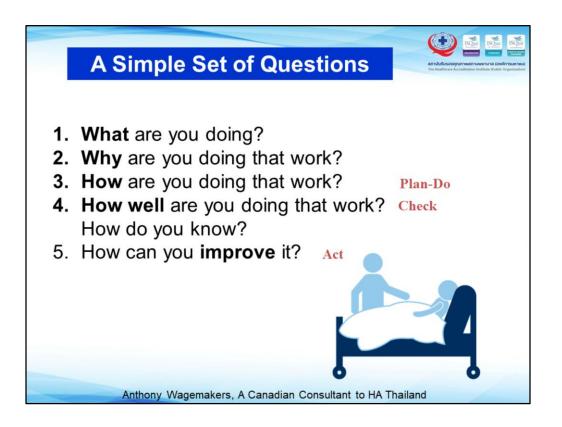


- 1. Transformation 1: review of daily activities
- 2. Transformation 2: quality management system (QMS)
- 3. Transformation 3: standard guided QMS
- 4. Transformation 4: performance excellence

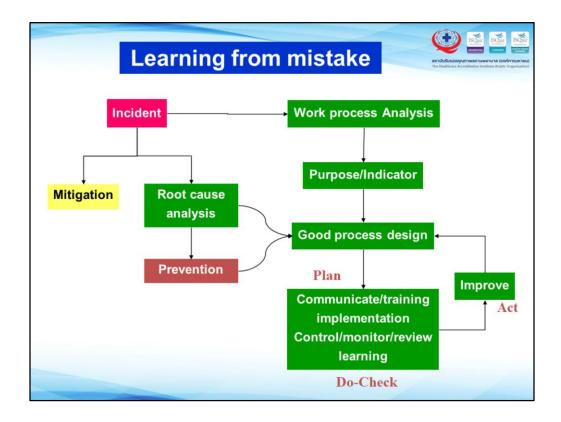
My keynote today will address on the transformation of the whole organization that will result in benefit to most patients, of which we may think of transformation at 4 levels. It is similar to climbing the Mt. Everest, we have many basecamps as we proceed step by step.



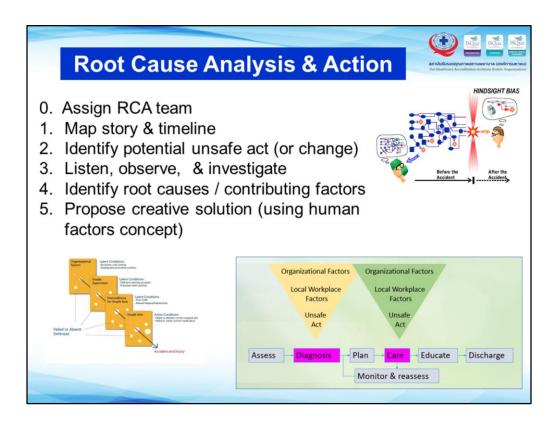
The first transformation is a simple one, review of our daily activities. It's so simple that every staff can do for every activities. Also it can be link to some of advanced quality tools such as RCA or trigger tools.



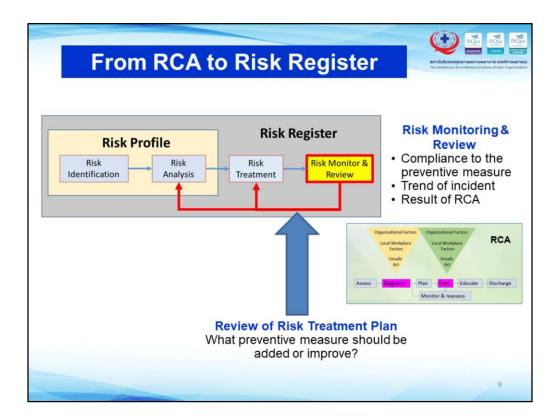
When we started accreditation program 20 years ago, we invited a Canadian consultant to demonstrate a surveyor approach. At that time we had not finished our hospital standards. What he used were these 5 basic questions that are very powerful to stimulate people to think of the work they are doing. Especially the question of why are you doing and how well are you doing, we nearly never ask those kinds of questions. And the last question of how can you improve it is very encouraging to people.



A few years after we started the accreditation program, the government launched the UHC program and expected that all hospitals should have quality. That was a good opportunity that we could expand quality program to the whole country, so we started a stepwise recognition. The first step for the hospitals is to do quality review, to learn from errors, mistakes, and unexpected events.



On RCA we learn some important point. The first one is that assignment of an RCA team is important. Rather than expecting people involved in the event will learn from RCA session, a team with RCA skill is better to do this job. The second point is that we can get use of hindsight bias to find a point of potential change, or in negative term we can call 'unsafe act'. Each point of potential change should have its own root cause. The third point is that listening to the people is a key to find solution. The forth point is that there are 2 dimension of Swiss cheese, one along the work process, and the other one along the workplace and organization factors. The last point is that using concept of human factor engineering is important to create a strong action for prevention.



We can use the result of RCA to strengthen the risk management process. In the tool for risk management call 'Risk Register', the most important part is risk monitoring and review, review to improve the preventive measure. RCA result can help identifying more preventive measure, using contributing factors from real events.

Link Academic Activities with Risk Management System



- For each MM Conference or similar activity, add 4 more questions to be considered:
 - Any diagnostic error?
 - Any adverse event (AE)?
 - If yes, what's the root cause?
 - How can we prevent that AE?
- Link those information with the hospital's risk management system

We can also link academic activities, such as MM conference, with the risk management system. Just ask the team to add 4 more questions during those activities, we can get a useful information.

Trigger Tools & Concurrent Review



- 1. Monitoring of daily incident
 - . e.g. fall, pressure sore, infection, med error, ADR
- 2. Concurrent review alerted by triggers
 - Lab (pos blood culture, PTT>100, INR>6, glucose<50, 2x rising BUN)
 - Pharmacy (vit K, Benadryl, Naloxone, Flumazenil, anti-emetic admin)
 - OR (change in proc., intra-op X-ray, intra or post-op death, organ inj/removal)
 - RR (intubation/reintubation/BiPAP use, X-ray in RR)
 - ICU (post-op ICU admission, use of post-op ventilator >24 hrs)
 - LR (instrumented delivery)
 - Blood bank

Review of treatment failure

- ER revisit
- 30-day readmission
- ICU readmission
- Repeat surgery
- Refer to higher level of care
- Death

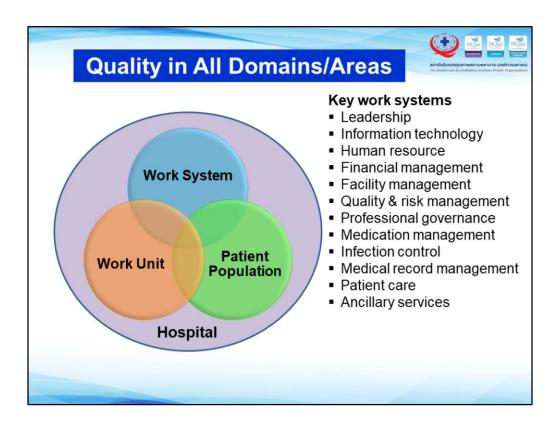
4. Other reviews

- Patient experience & complaint
- Efficiency of work process & resource utilization

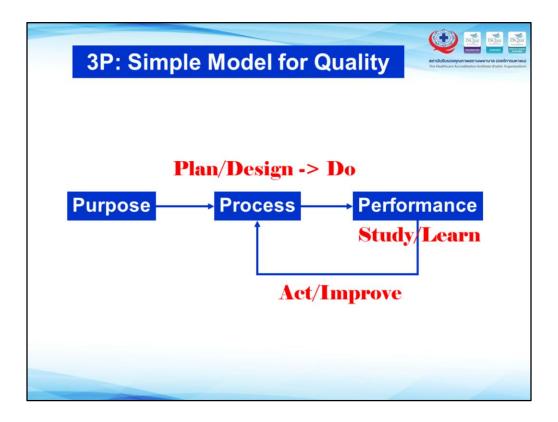
The IHI proposed using triggers to identify adverse event during medical record review. We can modify this approach to use in daily work. Some of the triggers are incidents and nurses have already monitored in their routine work. Some of the triggers can help to alert patient care using concurrent review, i.e. some unit will inform patient care unit immediate from those triggers. Some triggers reflect treatment failure that we can usually find adverse events and should be seriously get attention. The other 2 reviews are added to fulfill the value-based healthcare concept, i.e. people centered care and efficiency of the system.



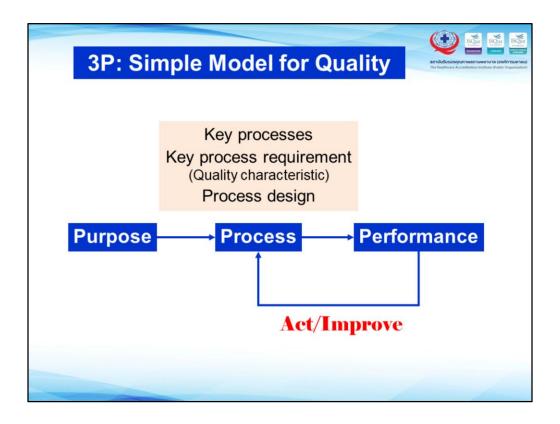
The second transformation is setting up quality management system. Some may feel familiar with this term in ISO9000.



Quality management system should be apply to all areas and all domains. We identify 4 domains in a hospital and an example of key work systems is demonstrated in the picture.



For ease of implementation in all domains, we simplify the quality management into 3P: purpose-process-performance, or PDSA with emphasizing on purpose.

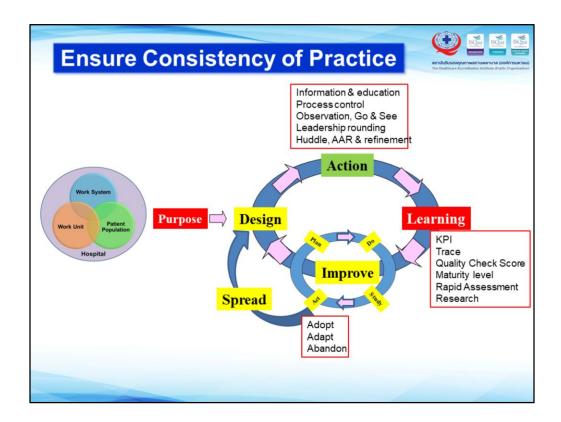


The important of process management is to identify key process requirement or quality characteristic of the process, and use the process requirement for process design. It's something that we think we understand, but team members may understand differently. To express the process requirement explicitly is a good starting point of management for quality.

Design Principles to Prevent Human Error	
	Avoid reliance on memory
	Simplify process
	Standardize common process
	Use forcing functions and constraints
	Use redundancies (double check, cognitive review)
	Take advantage of habits and patterns
	Promote effective team functioning
	Task analysis & workflow
	WHO & IHI Open School

In process design, we should find the way to make people do the right thing easily, and difficult to do the wrong thing, this may call human factor engineering concepts. This list is an example of applying human factor engineering for process design.

One of an interesting example was raise during the preconference workshop this morning, i.e. to use capital letter in drug transcribing process to reduce medication errors.



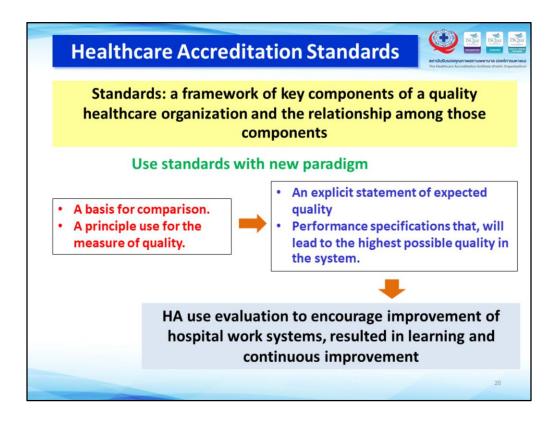
To ensure consistency of practice of ensure compliance with policies and procedures, leaders have many things to do, e.g. education, observation, rounding, AAR, KPI monitoring.



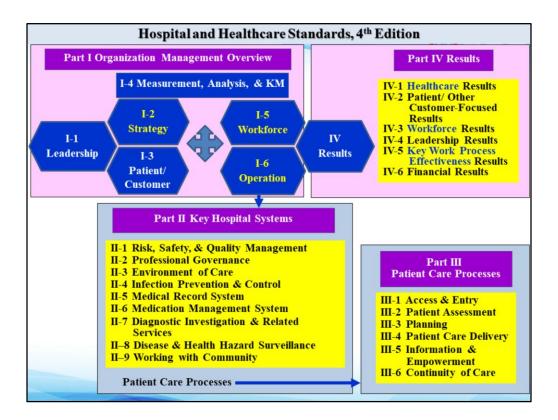
Quality management and knowledge management are part of each other. We can use tacit knowledge to improve process design, at the same time we can get tacit knowledge from our action. We also get explicit knowledge from our learning and improvement.



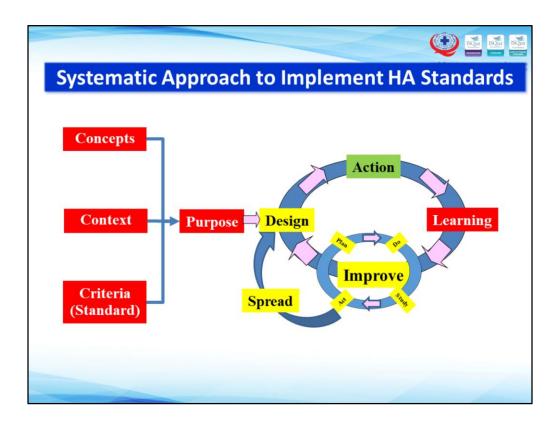
The third transformation is implementing quality management system with guidance from standards for healthcare organizations.



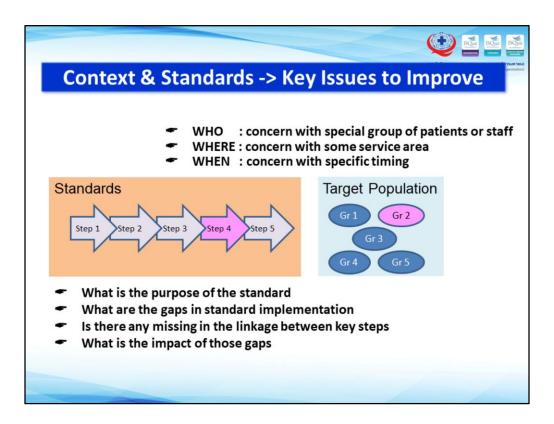
In our HA program, we use standards with new paradigm. We move from using standards in an audit mode or checking for compliance to the learning mode or encouraging improvement of hospital system.



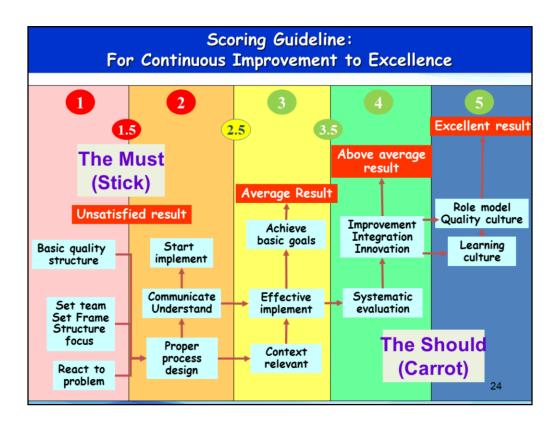
This is the structure of our HA standards. The structure on the top is based on Malcolm Baldrige National Quality Award of US. Specific criteria for key hospital systems and patient care process are added.



In implementing the HA standards, we still using the model PDSA, adding another 3Cs. i.e. concepts, context, and criteria or standards.



Considering context together with standards, we can identify key issues for improvement which may be some steps or some specific groups or places. It is a priority setting process.



Scoring guideline is a tool for hospital staff and surveyors to assess maturity of the system and find opportunity for improvement. The criteria for decision is at the middle, above this criteria is a reward.

Rapid Assessment



- Aim to find opportunity for improvement in a short period of time
- Be clear on the issues to be assessed and the results to be used
- Use as small samples as possible
- Use a few valid questions, combine quantitative and qualitative questions

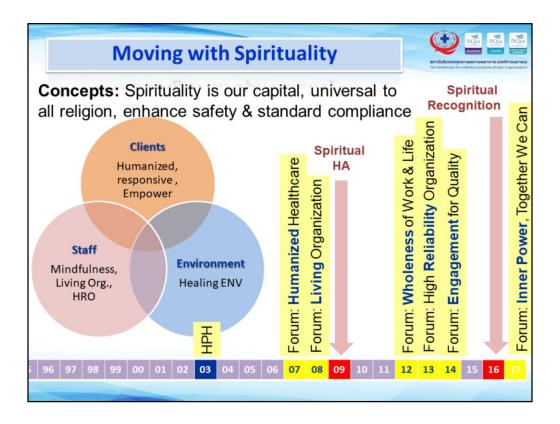
We found that indicators is not enough or may not be suitable for evaluation of all issues. We encourage hospitals to use rapid assessment in addition to KPI so that they can know their situations and plan for further improvement.



The fourth transformation is to move beyond standards, to performance excellence.

Performance Excellence ■ Measure key performance ■ Key work system ■ Key patient population ■ Benchmarking & continuous improvement ■ Improve maturity of the organization ■ React to problem -> improvement orientation -. Systematic evaluation & improvement -> learning & strategic improvement -> organizational innovation ■ Pursue strategic opportunities ■ Prepare for future organizational needs

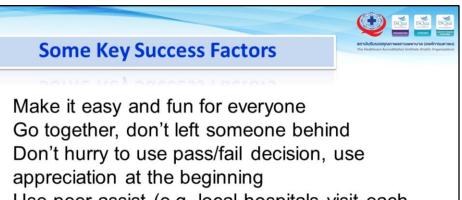
To demonstrate our performance, we have to measure key performance of our key work systems and key patient population. Benchmark our performance with similar organizations to encourage further improvement. An organization with performance excellence needs to move its maturity from react to problem to improvement and innovation, pursue its strategic opportunities and prepare for future organizational needs.



Along with improving our quality management system, we can also implement soft side of improvement, i.e. considering spirituality in our healthcare system. What are spiritual needs in patients and family, how can we response to their need with love and compassion? Can we empower the patient to use the remaining inner strength in the healing process? Can we train and use mindfulness in our work? Can we create environment that support healing for the people? Many of the theme of our annual conference were based on these concepts.



The basic transformation is to change our way of thinking, our way of communication with each other, and our way of treating each other. The Baldrige core values and concepts is a good starting point to considered, as example.... Let's question and try. We cannot change ourselves because other people tell us, we must experience by ourselves.



- Use peer assist (e.g. local hospitals visit each other) and sharing
- Integrate all concepts and tool of improvement into practice
- Work with partners
- Keep on moving

The most important lesson is to start small and move together.



Hope that you will have a successful conference, thank you very much.