



# The HPR-method = Health Care Process Reengineering

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## Foreword

This booklet is worked out during the EPEL-project, a co-operation project between Rovigo in Italy, Nancy in France and Höglandet in Sweden. EPEL is short for European Project Developing Process Based Learning.

The booklet is ment to be a support for different kinds of small groups working with developing projects, were they look at the whole process and where the indication is to increase the patient values.

The booklet is built on the HPR-method, which is developed by Inger Sannes, IBM, Stockholm, Sweden. It contains a simplified description of the method and some tools that are usually not used in the work with HPR.

You can find a more detailed description of the tools in the book "Förändringsarbete" developed by Ericsson Quality Management Institute.

Anette Peterson  
Nurse  
Medical department  
Eksjö  
Sweden

Marie Bäckström-Andersson  
General practitioner  
Primary care  
Eksjö  
Sweden

# HPR = Health Care Process Reengineering

## Background

The health care system is always in need of developing their activities towards higher efficiency and a better quality in the total process. This demands high flexibility and developing power by the personnel.

## Aims

The purpose of working with the HPR-method is to create an understanding for the system and show how every single collaborator influences the result. Through the analysis the personnel develop an understanding, a motivation and a creativity for changes. This demands education and active participation by key-people who knows about the health care system (doctors, nurses, assistant nurses, paramedical, secretaries etc). The aims with the work is also to make the personnel take initiative to, and learn to continuously carry on with independent work of development.

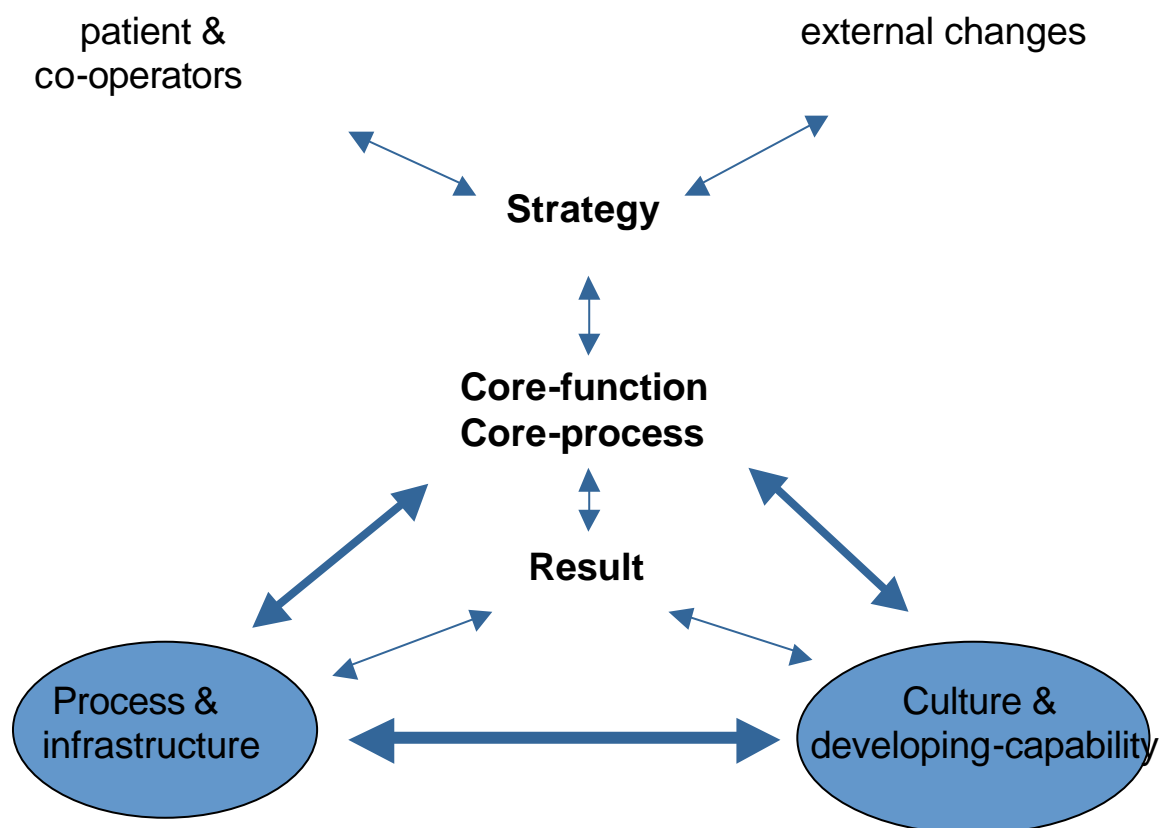
## Successcriterion

To succeed with work of development you have to consider:

- Active participation from personnel in all levels and parts of the care chain. ( Key people who know about the core-functions and the most important working processes)
- honest and correct information to all the collaborators
- focus on "patientvalues" and most important co-operators in the whole care-chain.
- The management will lead and take active part in the work
- Create an understanding for work of development

To succeed with work of development you need an overall picture and a common way of attacking the problem.

To succeed with developing the activities and increase the personnel's capability of changes the most important thing is to have an overall picture and a common way of attacking the analysis of the organisation.



# Strategy

***A strategy which focuses on the core processes of the health care system.***

- The strategy is to focus the organisation and the personnel on priority values for the most important patient-groups.
- Another important part of the strategy is to identify how to meet external changes in an efficient way.
- In a process-oriented health care organisation you focus on the core-functions such as patient-treatment, education and development.
- Important support-functions like personal function, technical running, purchase etc should be developed in order to support what is important in the health care system (core- functions)

# Patient-values

## ***Focus on patient-values***

When we develop the organisation, it is important to focus the personnel's work on priority values for the most important patient-group. That is because it is the ground for our organisation and it is important that personnel has good knowledge about who they are and what is important to them.

Following things shall be valued and prioritised:

- ◆ Which are our most important patient-group and what is *important* for them?
- ◆ Which patient-groups has which need through the total process?
- ◆ How does the health care organisation meet with the patients today and what patient-values should be prioritised in the future?

### **Work with values through different perspectives:**

- ◆ Clinical (for example mortality, morbidity)
- ◆ Functional (for example physically, mentally, socially)
- ◆ Satisfaction related to needs (for example with the way of receiving care, the experienced gains of health)
- ◆ costs (directly or indirectly)

It shall be possible to measure the priority patient-values to be able to show that the changes carried through are improvements.

(The different perspective is collected from "Värdekompassen" - developed by Landstingsförbundet.)

Working-model 1.

# Co-operators

## ***Focus on co-operators***

When we develop the organisation it is important that the personnel also work with prioritised values for the most important co-operators.

- Who are our *most important* co-operators and what are the most important improvement areas for a efficient co-operation.
- To value the most important co-operators we consider how often and how important the communication with the unit is (volume, competens etc)



# External changes

*I identify external changes that can have an influence on the organisation.*

One important criteria to succeed in the long run is that the personnel has the capability to develop the competens and there work after different forms of external changes.

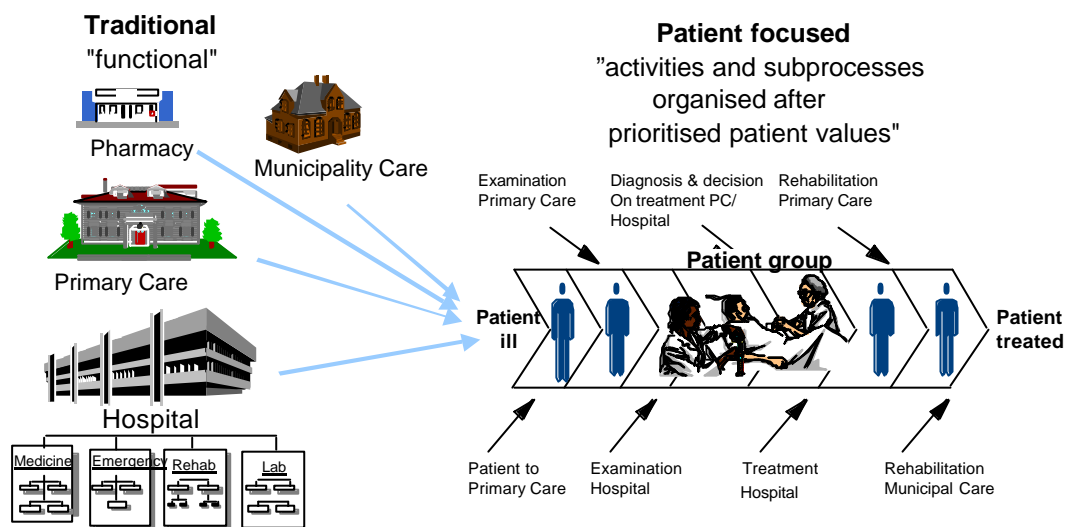
Example of changes can be:

- ◆ Changes in the health care system. How will for example reductions influence the health care system?
- ◆ Changes in treatments. Will new medications or methods influence on the working-processes or relationships with co-operators?
- ◆ New technology which will make the working-process and communication with different care-givers more efficient
- ◆ changes in people's need of care.

# Coreprocess

## *Processes that support effective care-chains*

Developing a process-oriented healthcare system demands re-engineering of work and organisation.



A process-oriented flexible healthcare system endeavour to:

- develop the personnel's competence to support the commission and core-function
- only doing activities which have a value for the patients.
- Reduce activities that has no value (for example to register the same information several times, many time-consuming transports of patients and personnel etc)
- reduce the number of steps in the total process
- make the responsibility clear (Patient-responsible doctor, process-owner, owner of part of process)
- shorter *part of the time* for critical working-processes (with part of the time we mean for example the time it takes from taking a bloodtest until the patient has the answer)
- reduce waiting-time for personnel and patients
- make information transformation and communication between the different parts of the care-chain more effective.

# Analysing the process

*Analysing the care-chain by using interviews with focus on:*

- Most important care-chain and working-processes:
  - Activities
  - Personnel involved (number and different groups)
  - patient-values through the whole care-chain
  - communication and information transfer (critical parts in the care-chain)
  - waiting-time (patients and personnel)
  - times (in the total care-chain and in part of the process)
  - resources and costs
  
- Infrastructure which support effective care-chains and working-processes:
  - I T-support
  - buildings
  - working-organisations

# Questions to the care-chain and the critical working-processes

## ***Interviewees of personnel***

1. How do we meet the most important patient values in the flow of patients through the health care system?
2. How do you communicate and transfer information between different personnel groups and different units/ departments involved in the flow of patients.
  - Inside the unit/department
  - To the most important co-operators
  - Examples of documentation
3. How and when do the patient or relatives get the information, and how do you know that they have understood it?
4. Are there activities/processes that don't create values for the patient that you could drop?
5. Are there activities/processes that creates values for the patient, that you don't have enough time for ?
6. Can activities and processes be organised more efficiently than today?
7. Can the total time be reduced, and if so how?
8. Competence
  - Do the personnel have the competence they need to perform their work efficiently?
  - Do every personnel group know when they are taking over the responsibility for the patient?
  - Do the personnel have the information they need about the patient, to be able to perform their work with good quality?
9. How do you handle medicine (who in the process is involved and how)?

Working-model 4

# Questions to the care-chain and critical working-processes.

## Interview schedule for patients

This should be used as a support for the interview rather than as a schedule. Try to understand what is important for the patient (patient-values) in different situations.

The questions will be asked from the patients moving between different care providers in the care-chain ( from primary care to hospital, from hospital to municipal care, etc..)

### 1. What is important to the patient/ relatives during her/his move from one care unit to another?

- meeting personnel (nurse etc) from the new unit before the move?
- to get information about what is going to happen?
- that the unit or ward you are leaving has confidence in the unit you are moving to?
- that the personnel are trustful?

### 2. What is important to the patient /relatives concerning transferring of information and the co-operation between different units?

- that all units continuously know about each other's treatment?
- that they have a common care philosophy and goals for the treatment and care?
- that they co-operate efficiently?
- that the patient /relatives take part in the care planning?
- that the patient/relatives knows how to contact in different situation?

### 3. What are important to patient and relatives in the contact with different care provider?

- continuity in the contact?
- that the different care providers have good information concerning the patient's situation?
- respect for the patient/relatives integrity and values?
- keep settled times?
- listen?

### 4. What do You believe is important for patient and relatives if the patient need to go to the hospital?

- that the patient not will be questioned when they want to go to the hospital?
- that the transportation of the patient will go quickly without unnecessary stops?
- that there will be room for the patient?
- that the clinic has got the right information about the patient?
- etc...

# Analysing the care-chain and process

## ***Problem- and improvementarea***

Make groups of the problem- and improvementareas you found during the interviews and work with them.

A good way of making groups of the problems, is to use the tool "*affinity diagram*" (for thorough instructions read the book "*Förbättringsarbete - 7ManagementTools*").

Write down all the problems you found during the interviews on post-it. One problem on each piece of paper. If the project-group finds other problems they can complete with more post-its. Post-its with similar messages are put together. Summarise the message for each group.

Then the summary should be written down as a title over each table in working-model 5, and the contents of the other post-it writes down below.

In the work with problem- and improvementareas it is important to put up goals and suggestions for solutions. It is also very important to value the gains and costs for the proposed solutions.

Also value whether the proposed solutions can meet with the goals that you found for the work from the beginning.

# Action-plan

The point is that the result of working with the HPR-method should lead to a very concrete action-plan. There should be a description of the goals, suggestions for solutions and realisations. Other facts that the action-plan should contain is who is responsible and a dead line.

In working-model 6 you fill in the goals and suggestions for solutions that you found in the work with problem- and improvementareas in working-model 5. After that you discuss how you will make the solutions realised and who should do it.

Set out a time when it should be finished.

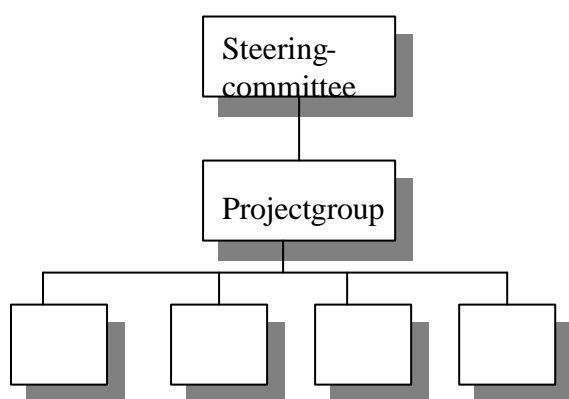
Perhaps some of the solutions or problems need to be better analysed in order to find the cause of the problem or a better solution. Then you can use "I chikawa-diagrams". (for a more specific description read in the book "Förbättringsaktiviteter") Write down the problem as a question on a "post-it notes". For example "what is the possible reason to that....." Every group member write down possible reasons on a post-it. Just one reason on each small paper. Put the post-it with similar reasons together. Write a title to all the groups, place this post-it in the end of each "fishbone" and place the other post-its in the order that the reason has been discussed. To value the most important reason the group members can grade the post-its. The note with the highest points is the one you should start working with.

# To work with the HPR-method

The HPR-method is most suitable for bigger projects where you look at the whole process or care-chain, but it can also be used in smaller work.

## *Larger projects*

Suggestion for the organisation in a bigger project:



The management from all involved levels and units are part of the steering-committee. They have the possibility to make decisions.

Personnel from all categories is included in the project/working group.

Key-people from all parts of the care-chain.

## **Establish a working-/project group**

A group of 3-8 people is just large enough.

The participators in the group should come from different categories and from different parts of the unit or units of the organisation which are involved.

The project-group is assigned to operate the work, arrange the work-shops, make the interviews etc.

## **Aims and goals**

The project-group should, together with the steering-committee, decide the aims and goals for the work.




# Continuing

## Write down the process

It is a good start to write down the process you will look into, so that every one in the project-group is on the same level.

Then you can use a flow diagram (for more specific instructions read on page 83-88 in "Förbättringsarbete").

Write the different steps in the patient-flow on post-its. One step on each small paper. Stick up the post-its on a large paper in the order that the activities come. Move the post-its if necessary. If you need to choose direction show this with a diamond symbol. 

## Workshop 1

Invite key-people (ca 20-30) from all parts and levels of the units involved. All categories of personnel should be represented.

Present the aims and goals of the work. Make a short presentation of the HPR-method. Divide the participators into small professionals crosswise groups. (3-5 in each group). The groups will discuss *Patient-values, Co-operators and external changes*. (Use the working-model 1-3) After the work in small groups an oral presentation will be held for the whole group.

## Interviews

After the first work-shop all the key-people will be interviewed. The project-group will make the interviews two and two together, to be able to make notes at the same time. ( use working-model 4) The key-people can be interviewed together with two or three from the same unit.

The questionnaire will function as a support during the interview and can complete the interview in the end if these question have not been answered before. The best way is to let the people being interviewed describe the process.

One interview takes about 2 hours.

# Continuing

## Summary

The project-group makes a summary of the interviews and groups together the problem- and improvement areas. Perhaps with the help of an affinity-diagram. Also proceed from the goals you set up from the beginning. Make the summary in working-model 5.

## Workshop 2

Invite the same key-people again to a second workshop. Present the problem- and improvement area which was found during the interviews and divide the participants into small groups after the number of problem areas. Every group discuss at least one problem area.

The groups will work with working-model 5. Decide goals, suggestions for solutions and value the gains and costs for the suggested solutions.

There after every group will present and discuss their suggested solutions in the whole group.

## Workshop 3

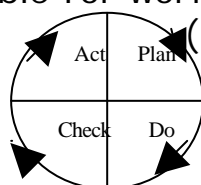
To the last work-shop you will invite all the key-people together with the management from all connected units.

The participants should be divided into small groups. One problem area to each group.

The groups discuss the goals, suggested solutions, how it should be realised, when it should be finished and who will be responsible. (use working-model 6)

The solutions should be realised in small steps, which will be tested on a small scale, for example in a pilot-project. Make an evaluation before carrying it through on a large scale. You should also describe what to measure, to make sure that the planned change will be an improvement. The result of the day should be a very concrete action-plan.

The project-group is responsible for working with the action-plan using for example the PDSA-wheel.



(For better description read in "Förbättringsarbete" page 7-9)

# Smaller project with HPR-method

## **Smaller developing-work or parts of the process**

For less comprehensive work the project-group can choose to do most of the work in the HPR-method by themselves.

The group look at patient-values, co-operators and external changes.

For the interviews you need to select personnel from all the involved units. As an alternative you can use earlier made interviews to find the problems of the work you are working with. Summarise, make groups of the problems and write them down in working-model 5.

Divide the project-group and work with the problem- and improvementareas and create an action-plan.

Work with parts of the action-plan by using the PDSA-wheel and make a specification of each commission.

P - Plan what to do, how and when

D - Do the changes as small pilot-projects

S - Study the result. Value and correct if needed

A - Action on a large scale.

## **Measure**

To know if the changes are an improvement you need to measure.

Measure towards the goals you wrote down in the beginning of the work to show that you are going in the right direction.

Use the measure points you wrote down at the start when you worked with patient-values out of different perspective.

The measuring should be done in all the tests and pilot-projects to show if it is worth increasing and introduce the change in all areas/units.

# Enclosure

- Working-model 1a - Patientvalue
- Working-model 1b - Patientvalue
- Working-model 2 - Co-operators
- Working-model 3 - External changes
- Working-model 4 - Description of care-chain
- Working-model 5 - Problem- and improvementarea
- Working-model 6 - Plan of action