Workshop 5 – Input from Denmark

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6 Questions

- a. The approach taken to implementing costing (sample of hospitals or all hospitals, scope of collection, extent of top-down versus patient level?)
- b. How to engage hospitals and persuade them of the benefits in collecting and using the data for themselves
- c. What does good look like in relation to data quality? Focus especially on the balance between patient level and cost allocation methods
- d. Key factors that helped and hindered the collection process
- e. Data quality and how long it took or expect to take to improve
- f. How the benefits of the data were realised (especially for providers).

a. The approach to implementing costing

The approach for the Danish DRG-system

- Patient level costing, we price every patient in historic data to calculate tariffs – we have one set of national tariffs
- Cost database covers all activity in public somatic hospitals (90~100% of public hospitals)
- Most activity data is reported to national registers, although some extra needed
- Strategy to get access to many data sources – not all lasted (next slide)
- We use weight systems to distinguish resource intensity of procedures etc.
- We get distributed cost accounts from hospitals (yearly manual process)
- We make the cost database – all the calculations
- We return the cost database for local uses

b. How to engage hospitals

First af few word on the Danish experience

- First tariffs used in Denmark 1996 was from Norway. It was not recognised as valid from producers side.
- To get acceptance among the hospitals and clinical societies, it was important to have broad participation and a national DRG-logic, developed to reflect Danish clinical practice.
- First pilot from small sample of hospitals. One local, one central one university hospital.
- Hospitals found the enriched data from the Cost Database useful
- Danish build DRG-system 2002 – accepted by all parties – helped engagement
- DRG-incentive schemes 2002 and requirement for local ABF – vastly increased engagement
- Productivity reports – Increased focus to be a well run hospital

Sum up: We quickly made it a win-win, both to get valid tariffs, acceptance and value-creation of cost data.

On top of that the incentive schemes and DRG-funding pushed for engagement to participate to make the system high quality. Productivity reports also gave an incentive to be measured correctly.

c. Good data quality

- We need **”good enough”.** Tariffs in Denmark is mainly used for redistributing of funds, not total funding.
- We use several cost allocation methods.
  - General ward costs – bed days (per day)
  - Intensive care (per hour) – we tried to get data on severity
  - Procedures/surgery (relative cost weight of interventions, based on ABC)
  - Clinic (relative cost weight systems, per speciality, based on time estimates)
  - Lab, patology, microbiology etc. (relative cost weights, based on time study/ABC)
  - Custom methods (fx medicine)
  - Patient lists
- All methods same on national level. We try to keep weight systems updated, but not as frequent as we wish.
- A weak point is telemedicine.
- We get distributed accounts reporting from hospitals. Quality is dependent on local factors.
- We set the framework on how to do reporting and what the options are. But quality of reporting is depended on how much time and knowledge is allocated locally.

d. Factors that helped and hindered the collection

Helped

- A general acceptance of the system –we are in it together
- Hype around DRG (at time of introduction 2000s)
- An incentive pool (extra funding) based on DRGs - high focus from management level
- Other national funding models based on DRG – high focus from management level
- National Patient Registry since the 1976 and one national ID-number since 1968
  - It was easy to get the basic activity data
- We financially supported the extraction of (extra) data collection
- We help with expertise, a small team helping hospitals start up.

Hindered

- To do good cost distributions it requires senior level expertise.
- Now: Less focus on DRG…

e. Data quality and how long it took?

- Quality by numbers took 5-8 years. High quality in costing similar time (common template and method)

Table 4.2 Coverage of the Hospital Activity in the National Cost Database					6
Fiscal year	Admitted inpatient	Outpatient	Admitted inpatient	Outpatient	
	Number of contacts		Pct. coverage		
2000	49.000	300.000	5	5	
2001	193.000	683.000	20	20	
2002	388.000	1.650.000	39	38	
2003	384.000	2.800.000	38	37	
2004	924.000	5.100.000	90	88	
2005	985.000	6.500.000	97	95	
2006	842.000	4.300.000	81	80	
2007	1.979.000	9.950.000	84	55	
2008	1.488.000	9.064.000	62	47	
2009	1.432.000	10.005.000	59	49	
2010	1.867.000	14.093.000	77	68	
2011	2.086.000	15.539.000	83	71	
2012	2.282.424	18.488.996	86	78	
2013	2.285.502	18.648.057	86	79	
2014	2.324.966	18.952.138	86	73	
2015	2.494.953	22.783.373	91	84	
2016	2.494.953	22.783.373	91	84	
2017	2.622.647	25.032.611	94	82	

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f. Benefit for the hospitals/regions

- With their participation we could do the DRG-system
- DRG - A common language / currency
  - A way of talking about activity between non-medical staff and medical staff
  - Inside a hospital
  - Between hospital and region
  - Between region and national level
- Planning purposes
  - When moving activity from one to another hospital, DRG is usually used as first estimate
- Payments between regions (money follows the patient)
  - DRG gave fair payments with high transparency
- Local cost database
  - Insight into own costs, although not all hospitals use the information

Lessons learned

- Get started – because it takes time to get good data
- Get people onboard, hospitals, doctors etc.
- Find funding to cover implementation IT-costs - smoothens things out
- Be assistive – we had a small team assigned to help start the proces
  - Facilitate ”experience sharing” – groups
  - (In Denmark they helped set guidance and aligning methods)
- Transparency in results – show the good and the bad

Do’s and dont’s

Don’t think you can do it alone..Do it together!