LECTURE NOTE (7): HEALTH POLICY FOR SUPPRESSING HEALTH CARE COSTS

Economics of Aging

Increasing Medical cost

- Leading Factors
  - Income: GDP
  - Aging Issues: Long-Term Care Insurance since 2008
  - Coverage Rate of NHI: MRI since 2005 and Ultrasound since 2006

- Solutions?
  - Considering coverage of basic need by NHI,
  - Suppress Medical cost by supply-side cost sharing or demand-side cost sharing policy
  - When it comes to policy effect, SSCS might be powerful. Why?

Policy Tools of SSCS

- Reimbursement system
  - Connected with doctor's practice behavior
  - Prospective payment method
  - Retrospective payment method
  - Relationship between doctor and the elderly patient

- Pharmaceutical cost containment policy
  - Demand for medicine of the elderly is greater than other population groups

Analysis of medical cost increase by supply side factors

- Observation data of medical care utilization

	1990(A)	1995	2000	2002(B)	B/A
수진율[1](건)	3.24	4.46	6.30	7.49	2.31
내원율[2](일)	7.94	9.50	11.63	13.94	1.76
내원일당 진료비(원)	9,283	14,454	21,936	21,303	2.29

주: 1) 1인당 연간 진료건수, 2) 1인당 연간 내원일 수
자료: 국민건강보험공단, 『건강보험통계연보』, 각년도.

- Number of visit ← demand side factor
- Medical cost per visit ← supply side factor

Fee for medical service

Intensity of service

Factor 1: fee for medical service

- Comparison of the increasing rate of NHI fee level with consumer price index

구분	1990	1992	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
수가 지수	100	114	127	150	150	172	178	194	239	256	249	256
물가 지수	100	116	129	135	142	148	159	161	164	171	175	182

자료: 국민건강보험공단, 『건강보험통계연보』, 2003.
통계청, 소비자물가지수.

- Increasing rate of fee level: 2.56 times between 1990 and 2003
- Increasing rate of consumer price index: 1.82 times
- Any reason? Focus on 2000 and 2001 → which policy or event happened at that time?

Factor 2: supply-side factor

- Roemer's law: "Hospitals once provided tend to be used."
- Number of doctor or beds and adoption of new medical technology induce demand for medical service and in turn rise medical cost.
  - Spread of High-tech medical equipment

(단위: 대)

국가명	CT	MRI	ESWL
한국	2.73	0.68	0.48
호주		0.47[c]	
오스트리아	2.63	1.16	0.18
캐나다	0.95	0.35	0.04
덴마크	1.37	0.66[c]	
핀란드	1.37	1.10	0.04
프랑스[b]	0.96	0.28	0.09
이태리	2.19	0.86	
일본[b]	8.44	2.32	
뉴질랜드	1.06	0.26[a]	
스페인	1.25	0.57	0.18
스웨덴[b]	1.42	0.79	
스위스[b]	1.85	1.30	0.39
영국[c]	036	0.39	
미국[b]	1.36	0.81	0.27

주: a) 1998, b) 1999, c) 2000.
자료: OECD, *OECD Health Data*, 2003.

  - On 2005, Korea has 580 of MRI, 1,613 of CT and 1,930 mammogram
  - The number of high-tech medical equipment might be related with Fee-For-Service payment system of Korea

Reimbursement system

- Cost increasing method: retrospective method
- Cost containing method: prospective method
- Given asymmetry of information between doctor and patient,
- A doctor under prospective method might share the risk of financing medical service provided to patient
- What if the lower level of fee schedule of Korea? Can doctor's behavior be regarded as rational one?

Cost containment policy of foreign countries

- Classification of cost containment policy
  - Cost shifting or cost sharing
    - Co-payment and drug formulary → sort of demand-side cost sharing
  - Budget setting
    - Control of not only price but quantity
    - Global budget, price-volume arrangement
  - Direct control
    - Control of number of doctor, beds and high-tech medical equipment
    - Control of fee schedule
    - Health technology assessment

Type of cost containment policy

- Type of cost containment policy (출처: 인구고령화와 보건의료, KDI, 2005)

	비용 전가/분담	직접 규제	총액 규제	비고
의료 서비스		· 수가 통제 (fee control) · DRG	· 총액예산제 · 인두제	진료비 보상방식
	· 급여제외 (예: 치과, 안과)	· 의사공급 규제 · 병상수 규제 · 고가장비 규제		기 타
의약품	· 급여대상목록 (positive list) · 급여제외목록 (negative list)	· 약가 통제 · 이윤 규제 · 참조가격제	· 약제비 예산제 · 약가-사용량 연동제	
공통	· 본인부담 (co-payment)	· 보건의료기술평가 (HTA)		

- DRG(Diagnostic Related Groups)
- Reference pricing: same treatment group has same reimbursement price → consumer should take some portion of drug cost
- HTA: the result of economic evaluation is used for setting fee or determining insurance coverage

cost containment policy in detail

- Direct control
  - Effect of price control
    - Increase of the quantity of medical care service
    - Substitute for high-fee service
    - Increase of non-coverage service
    - For example, natural delivery might be substituted by cesarean section delivery
  - Effect of DRG
    - Readmission of hospitalization
    - Up-coding
    - Substitute for outpatient service
    - Early discharge

cost containment policy in detail cont.

- Budget setting
  - Presetting of budget which is supposed to be used for providing medical service or drug
  - Classification
    - Fixed budget: obligation of abiding budget is given.
    - Target budget: a kind of guideline
  - Example: price-volume arrangement → if the real sales amount is larger than expected one, the price of drug is cut.

Budget setting: Taiwan Case

- Process of adopting budget setting
  - NHI was introduced at 1995.
  - Budget setting was initiated as policy device of suppressing medical cost from 1998.
  - Objects of adopting Global Budget Payment System
    - Control of medical cost
    - Enhancement of quality and efficiency
    - Increase of authority of expert
  - Basic principles
    - Suppliers and insurer should take the financial burdens, so the medical expenditure above budget is going to suppliers.
    - Inducing supplier's cost preserving practice behavior by providing economic incentive rather than regulations