Professional Caregiver Insurance Risk and Average Cost Based Reimbursement Plans: Implications for Nursing

State of the Science Congress

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“The pump don't work 'Cause the vandals took the handles”

SUBTERRANEAN HOMESICK BLUES

Words and Music by Bob Dylan 1965
Warner Brothers Inc.
Renewed 1993 Special Rider Music

Who am I – How and Why I developed PCIR?

Nurse

(Bio)-Statistician

Mathematician

Social Worker

Actuarial Analyst

Chartered Property Casualty Underwriter

Editor: The Society of Rogerian Scholars News Online

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In the tradition of Martha E. Rogers and Florence Nightingale, I look for the roots of environmental impediments to health by focusing on wholes

OBJECTIVES

Describe "Professional Caregiver Insurance Risk" and its impacts on healthcare providers and consumers

Analyze the risk characteristics of 'product-line' marketing and management, and budgeting of nursing/health services

Describe the impact of PCIR on the healthcare system, emergency planning, and crisis preparedness

Suggest policy changes in financing of nursing/health care to recognize/plan for the insurance risks assumed

Get you to visit www.afn.org/~mathstat

Promote nursing research on insurance risk transfers

Risk and Insurance

Insurance – Insured pays Insurer a premium to avoid exposure to uncertain future outcomes

Premium = Loss + Expense + Profit + Risk charge

= Average Costs + Risk charge

Risk charge is based on the variation in loss exposure/cost

- **High variation ➔ High Risk Charge**
- **If single loss is very large – average loss won't cut it**

Inadequate premium income is also an inadequate risk charge – the heart & soul of the insurance premium

When average costs are switched for a total premium – insurers will eventually go bankrupt whether formal insurers or 'risk assuming' or 'risk-sharing' PCs

Less than Ideal Insurance

- Insurer writes few and dissimilar contracts
- Poor predictions of risks and high expenses are more like gambling than insurance
- Premiums: insured’s are low; insurer’s are too low
- Correct premium may be unknown for years
- Risk for large losses is high and insurer solvency is jeopardized, e.g.
  - Event insurance
  - Insuring an athlete’s/models legs
  - Lloyds of London – Asbestos exposure
  - Reliance Insurance Companies

Legitimate Insurers v Policy Aggregators

‘Legitimate Insurers’ (LIs) write many insurance contracts and the LLN and CLT help them manage risk, charge a small ‘risk premium’ plus loss, expense, and profit costs, ensure profitability, and provide a public service by reducing risk for all parties

Homeowners	**Automobile**
Life insurance	**Traditional Health Insurance**

‘Policy Aggregators’ (PAs) write many insurance contracts, shift risks to undercapitalized PCs, abdicate insurer role, pay less than it costs to manage risk, guarantee their profits, increasing financial, practice, and health risks for PCs and consumers

Some HMOs, Capitation Agreements, DRGs

Federal/State & private cost-containment programs

Inadequately budgeted departments in healthcare organizations

Professional Caregiver Insurance Risk (PCIR)

"Financial risk incurred by PCs (Ind'ls/Orgs) that agree to provide unknown services, at unknown costs, to a cohort of clients, for a premium paid by PAs. PCs have skills, training, and credentials to provide clinical services but not the skills or financial capacity to manage insurance risk assumption."

Risk transfers reduce uncertainty and increase predictability and profitability for PAs

Risk transfers increase uncertainty and decrease predictability and profitability for PCs.

ACBRP and PCIR – How it Developed

Original concept - capitation contracts and MDs (circa 1995)

Interim - anyone seeking to pay average costs to avoid variable costs

Latest – The norm for nursing departments

Examples:

Capitation contracts

DRG financing

Medicare/Medicaid cost-containment

Preferred Provider contracts that limit reimbursements

Intra-organizational budgeting

PCs lose control over the services they provide - may be unable to provide mandated services at average costs

ACBRP fees tend to be priced as last units of service – do not cover startup and fixed costs and they tend to be based on past costs, ignoring or restricting technological innovation costs

How is PCIR Like Insurance?

PA or other entity passes insurance risk to PCs

Average cost ‘premium’ is paid to providers to cover costs

Actual financial outcomes are unknown at time of transfer

Contracts are either ‘profitable’ or ‘unprofitable’

Difficult to alter costs – except by denying service

Profit or loss in any period may be due to skill or ‘bad luck’

Risk accepting PC has limited though excessive loss liability

Those at risk in failures are third parties - clients

Large numbers of individual ‘policyholders’ involved

Over time, failure is inevitable due to inadequacy of premiums

Gambler’s Ruin

Risk Comparison Between Policy Aggregators and Professional Caregivers – Normal Curve

Expected loss = .85
Std error = 0.05
Portfolio Assumed = 1/20

Loss Ratio	Insurer Risk	Provider Risk		Relative Risk
0.85	0.5000	0.5000		1.0000
0.86	0.4207	0.4822		1.1460
0.87	0.3446	0.4644		1.3480
0.88	0.2743	0.4466		1.6290
0.89	0.2119	0.4290		2.0250
0.90	0.1587	0.4115		2.5940
0.91	0.1151	0.3942		3.4260
0.92	0.0808	0.3771		4.6700
0.93	0.0548	0.3603		6.5740
0.94	0.0359	0.3437		9.5650
0.95	0.0228	0.3274		14.3890
0.96	0.0139	0.3114		22.3960
0.97	0.0082	0.2958		36.0780
0.98	0.0047	0.2805		60.1760
0.99	0.0026	0.2656		103.9550
1.00	0.0013	0.2512		186.0540

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How is PCIR Unlike Insurance

Entity ceding risk is larger than risk accepting entity

Half of disaggregate fee payments are below ‘average cost’

No ‘risk premium’ involved – payment is inadequate

Overall risk exposure increases due to contract

PCs inadequately capitalized for insurance

PCs do not see themselves as ‘insurers’ until too late

Payment timing increases PCs $ problems – bonus plans

No state/federal regulation of PCIR as insurance

No accounting standards to assure liquidity/capacity

Non-performance is hard to prove – evidence dies w/ pt

Policy Aggregator (PA) Management Issues

PAs accounting practices make Enron look good

PAs have two very large and under-reserved liabilities:

- Legal action by PCs to recover $ value of losses
- Consumer claims for service denial

PA - PCIR risk transfers are hidden from public scrutiny, inadequately reserved, result in inflated earnings reports and inaccurate financial statements, & they violate accounting and insurance regulations

Hidden liabilities from risk transfers threaten PA solvency

Prediction: Many bankruptcies, restated earnings, and solvency concerns for insurers/HCOs as auditors review books & lawsuits are filed by PCs and clients

ACBRP Effects on Nursing and Health 1

Plan pricing and payment timing is for profitability, risk avoidance, and cost-containment benefitting PAs

Cash flow mismatches destroy PC's financial stability since PCs incur costs in advance of payments and losses may exceed available operating capital

Borrowing money or buying 'reinsurance' make it worse

Average losses shift with region, severity, capacity, time, technology, skill, sub-groups: HIV, rural-urban, age, inner city, worksite injury & illness exposure, site, unit, staffing – not accurately reflected in payments

Great and varied research opportunities

HCOs 'average costs' shift by unit, work shift, patient acuity, and staffing – rarely adequately budgeted

ACBRP Effects on Nursing and Health 2

Competitive insurance market ➔ minimal pricing

Risk reduction is lost – consumers are really 'self-insured'

Aggregators cannot pay more than their 'average costs' so PCs are accepting uncompensated risks of loss

Real risk assumers cannot compete with risk-averse PAs – must lower premiums and services to compte – PAs destroy the insurance mechanism and markets

Costs and complexity for PCs rise, not fall, with multiple plans & the need to alter practice for each client

Cost control and risk management may be incompatible with quality caregiving – ethical conflicts abound

PC's may feel ethically compromised when the care they render differs depending on the payments made

ACBRP Effects on Nursing and Health 3

- Continuity of care is lost - who is really responsible when a contract ends or care is incomplete?
- Disaster capacity loss – always running at maximum – nursing staff can deal with occasional shortfalls, but inadequate funding with risk transfers is perpetual
- Lack of redundancy effects nurses each day – inadequate supplies and staffing on units and mandatory OT
- Product line models exacerbate issues, assuming uniform inputs, processes, needs, & drawing resources off other services because they are usually more stable - when removed increase the remaining variability
- Chaos is inherent in acute nursing services – efforts to treat it as predictable & rational make the situation worse, not better – must fund redundancy

ACBRP Effects on Nursing and Health 4

The risks, losses, and harms extend in one direction - through PCs - to clients

PCs incur costs deferred by other PCs – especially in

- **Inter and intra-organizational risk transfers**
- **'Downloading' of high cost clients between contracts**
  - **and PCs, or from one unit/service or profession to another (MDs to nurses)**

Conflagration hazards due to concentration of risk

- **Influenza**
- **Accident**
- **Environmental problems**

Policy Implications 1

Separate Dx & Tx from cost control and insurance

Fully fund universal, primary, health care

Insurers should not be asked to pay first dollar losses – it is inefficient & inconsistent with managing risk

Institute a single payor finance mechanism or a single, uniform, insurance plan to reduce costs, inefficiencies, confusion, and ambiguities of coverage

Regulate insurers to manage risk *not* avoid it

Extend practice privileges of low cost/high quality PCs for primary and specialty care in all states - ARNPs

Make sure few APRNs fall prey to schemes such as 'risk-sharing', as did MDs, it is already happening!

Policy Implications 2

Reduce futile and expensive end of life/beginning of life care as a rational, deliberate, and self-conscious plan

Increase prevention, outlaw hazards: Hi-Fat food, smoking

Take responsibility for intentional, not incidental care rationing

Demand regulation of PCIR as insurance & refuse to go along w/ it

Advocate evaluation of nurse managers based on variability of services rather than strict budgetary compliance

Nurses, educators, administrators, and researchers need to identify, plan for, and manage financial risk issues in the workplace

Nurse managers, executives, educators, researchers, & nurses must focus on risk transfers as well as averages when looking at budgets, inputs, outputs, & outcome measures – nurses may do this properly – nobody else wants to do it at all!

MDs participated, so MDs cannot do this without exposing their role

MORE INFORMATION

www.afn.org/~mathstat

Never pass up an opportunity to ask an accountant exactly how much their specific work contributes to the well-being of your organization, or how much it costs to prepare their reports…

They should, after all, know the answer.

ACBRP Effects on Nursing and Health 2

Problems caused by ACBRPs

Half the risk transfers are under-funded

Actual costs vary around the average – use a normal curve model to show the effects of LLN and CLT in disaggregation

Costs are unpredictable or hard to predict

PCs MUST be redundant/inefficient to prepare for the unexpected – ACBRPs do not fund PC redundancy and inefficiency

As the proportion of a PC's PCIR load increases, they lose income, flexibility, and solvency

Tertiary care provision is inherently chaotic – no process control efforts really help this – they make it worse

What If Providers Don't Perform?

Providers may:

Be vulnerable to "buy out" by aggregators

'Tighten belts' to control losses – limit Dx & Tx

Shut their doors, leave/change practice

Policy Aggregators may:

Tell consumers they chose PC – no switching

Tell consumers to deal directly with their PCs

Make it advantageous - through incentive plans – for PCs to limit/deny services

Purchase vulnerable PCs outright to meet obligations and because the price is right