Pay for Performance as a Disruptive Innovation in BC

Pay for What You Want Don't Pay for What You Don't Want

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Budget Breakdown Update with \$ at risk

	Ва	se	Atı	isk	Tot	al	
	\$	million)	\$n	nillion)	\$	million)	% at Risk
Base Funding using Resource intensity weighting	\$	887.0	\$	224.0	\$	1,111.0	20%
Activity Based Funding form PHSA/ MOH							
Transplant	\$	4.0	\$	6.0	\$	10.0	60%
Cardiac	\$	86.0	\$	80.0	\$	166.0	48%
Renal	Ş	8.0	Ş	26.0	Ş	34.0	76%
Alps and knees Cataracts	ې ک	-	Ş S	46.0	ş S	46.0 6.0	100%
Total Funding PHSA	\$	98.0	\$	164.0	\$	262.0	63%
PFF Program Earnings							
Emergency dept pay for performamce	\$	-	\$	10.0	\$	10.0	100%
Procedure based funding	\$	-	\$	14.0	\$	14.0	100%
Activity Based funding	\$	-	\$	5.0	\$	5.0	100%
Total PFF earnings	\$	-	\$	29.0	\$	29.0	100%
Total Acute	\$	985.0	\$	417.0	\$	1,402.0	30%
Medical Services plan/ Pharamcare	\$	325.0	\$	-	\$	325.0	0%
Patient/ Resident			\$	82.0	\$	82.0	100%
other costs (depreciation)	\$	76.0	\$	-	\$	76.0	0%
Total Acute	\$	1,386.0	\$	499.0	\$	1,885.0	26%
Other sectors and overhead	\$	1,277.0	\$	-	\$	1,277.0	0%
Total Vancouver Coastal Health	\$	2,663.0	\$	499.0	\$	3,162.0	16%

Disruptive Innovations in Health

- Minimally invasive surgery
- Robotic surgery
- Advanced Imaging
- Interventional radiology
- "Personalized" medicine
- Electronic health records
- Integrated health care
 - Pay for performance

Disruptive Innovations: Pay for Performance

- Pay for what you want
- Don't pay for what you don't want

I. Pay for Performance

- Learning from the UK and US
- P4P at Vancouver Coastal Health :



Emergency Activity Department Based P4P Funding

Activity Based Funding

Community Initiatives Procedural Care Program NSQIP

SPECIAL ARTICLE

Effects of Pay for Performance on the Quality of Primary Care in England

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N Engl J Med 2009;361:368-78. Copyright © 2009 Massachusetts Medical Society.

Table 1. Mean Clinical-Quality Scores for 42 Family Practices in 1998, 20	003,
2005, and 2007.*	

Variable	Mean Clinical-Quality Score					
	1998	2003	2005	2007		
Clinical care						
Coronary heart disease 'i	58.6±1.4	76.2±1.6	85.0±1.0	84.8±1.3		
Asthma	60.2±2.5	70.3±2.5	84.3±1.8	85.0±1.4		
Diabetes	61.6±1.8	70.4±1.5	81.4±0.8	83.7±0.7		
Patients' perceptions						
Communication with physicians	69.4±1.0	70.5±1.4	69.1±1.6	71.3±1.2		
Access to care (appointment within 48 hr)						
To see a particular physician	39.0±4.3	33.3±4.0	34.4±3.9	32.1±3.2		
To see any physician	67.2±3.3	61.0±3.7	63.9±3.2	64.2±3.2		
Continuity of care	70.7±1.7	70.3±1.7	66.2±1.8	66.0±1.6		

NEJM 361;4 July 23, 2009



Figure 2. Mean Scores for Clinical Quality at the Practice Level for Aspects of Care for Coronary Heart Disease, Asthma, and Type 2 Diabetes That Were Linked with Incentives and Aspects of Care That Were Not Linked with Incentives, 1998–2007.

Quality scores range from 0% (no quality indicator was met for any patient) to 100% (all quality indicators were met for all patients).

NEJM 361;4 July 23, 2009

HailOnline

NHS 'wasting billions with no benefits for patients' on cash incentives for GPs

By Jenny Hope

Last updated at 1:15 PM on 26th January 2011

Paying GPs cash incentives to improve healthcare often fails to produce the desired results, a damning report says today.

It accuses the NHS of wasting billions on 'pay-for-performance targets', which allow family doctors to supplement their incomes.

The study's conclusions are based on a multi-billion pound plan to lower patients' blood pressure, which had 'no impact' on cutting heart attacks and strokes.



Target culture: A new report claims performance-related GP's pay offered little benefit to patients

Pay-for-performance targets were introduced by Labour in 2004 at a cost of £1.8billion a year as part of a new contract for GPs. Around one-third of their average income – currently £105,000 a year – is linked to achieving these targets.

But the study found they did not help patients with high blood pressure and provides the strongest evidence yet that pay-forperformance offers little benefit.

The Government has pledged to reform the way GPs are paid for this type of work in the face of increasing criticism. They are to receive sweeping new spending powers under Health Secretary Andrew Lansley's controversial reforms and will form consortia to replace the soon to be abolished Primary Care Trusts.

Fig 2 Effect of pay for performance on blood pressure control and monitoring in United Kingdom.



Serumaga B et al. BMJ 2011;342:bmj.d108



P4P Unintended consequences-US

- Resentment with patients who refused to adhere to advice (not UK)
- MD's by-passed informed consent to do tests
- MD felt autonomy was lost (not UK)
- Increased workload (UK= hire more nurses, US = anger)
- Targets in UK incremental, in US fixed
- Data entered by MD in UK –US had few EHRs

Learning from UK/US

- Why pay extra for what you already have?
- "Good quality of care for hypertension was stable or improving before pay for performance was introduced."
- Trends were already improving
- What are you looking for : evidenced based care ? Patient experience: they may not be the same thing!
- Is this all the Hawthorn Effect?

Serumag, Ross-Degnan, Avery et al

Effect of pay for performance on the management and outcomes of hypertension in the UK: interrupted time series study, BMJ 2011:342:d108

Examples of P4P at VCH

- 1. P4P in the Emergency Department
- 2. Activity Based Funding in Acute Care
- 3. Community Initiatives
- 4. Procedural Care
- 5.Seed funding for quality

1. VCH - Success with ED P4P

Three separate streams of patients with independent targets to reduce wait times and improve access:

- 1. Admitted Patients (to an inpatient bed within 10 hours)
- 2. Not admitted patients, High Priority (discharged within 4 hours)
- 3. Not admitted patients, Low Priority (discharged within 2 hours)

Additional 36,000 patients treated within target wait time in 2010/12

Vancouver General Hospital Admitted Patient ED Length of Stay

(04/05 to 09/10 YTD)

VGH ED Admits Volumes vs Admit EDLOS (Fiscal Yr 04/05 to 09/10 YTD)



Prepared by: Sheazin Premji, Director Special Projects (VA)

June 15, 2009

Source: QUIST Emergency CUBES

Flags: VGH, Admitted to Hospital, Measures: Case Count, LOS - average hours (from arrival to dispositify

2. Activity vs Block Funding for Acute Care

- Goal:
 - A. to move acute care to outpatient services
 - B. to decrease length of stay
- Use RIW as index of acuity and fund on the margin
- Give more value to the ambulatory activity than the inpatient

What is a CMG?



Fig. 1: Algorithm used to assign patients to a Case Mix Group (CMG) in major clinical category 11 (diseases and disorders of the kidney and urinary tract).

RIW Funding

- Relates to the Case Mix Group and complexity of specific case
- Former method: "Global Funding" with new funding based upon old budget and <u>+</u> %
- In an attempt to encourage:
 - More out patient surgery
 - Faster turnover of patients
- RIW for *inpatients* funded at 0.4 and *outpatients* at 1.0+
- RIW= CDN \$ 3,400

VCH – Period 7 YTD ABF \$ Change from 2011/12 Baseline

ABF Facilities (Included Procedures)

	S	ame D	ay /	ABF\$	Inpatient ABF\$		Total ABF\$									
													20)11/12		
													A A	nnual		
(\$ million)			C	hange			C	hange			С	hange	No	tional		
			fro	m 11/12			fro	m 11/12			fro	m 11/12	/	ABF		ABF
	20)11/12	ba	aseline	2	2011/12)11/12 baseline		2	2011/12	baseline		Allocation		Payable	
VGH/UBC	\$	10.33	\$	(0.13)	\$	45.31	\$	2.26	\$	55.64	\$	2.13	\$	-	\$	2.13
РНС	\$	8.40	\$	0.36	\$	26.59	\$	(1.03)	\$	34.99	\$	(0.67)	\$	-	\$	(0.67)
LGH	\$	4.36	\$	0.07	\$	13.67	\$	0.92	\$	18.04	\$	0.98	\$	-	\$	0.98
Squamish	\$	0.56	\$	0.03		n/a		n/a	\$	0.56	\$	0.03	\$	-	\$	0.03
RH	\$	2.58	\$	0.29	\$	10.10	\$	1.35	\$	12.68	\$	1.63	\$	-	\$	1.63
Less: MOH expected																
growth (unallocated)			\$	(0.18)			\$	(0.65)	\$	-	\$	(0.82)			\$	(0.82)
Grand Total	\$	26.23	\$	0.44	\$	95.67	\$	2.85	\$	121.91	\$	3.29	\$ ·	10.10	\$	3.29

Notes:

- Procedural Care Program RIWs excluded

- Unused funds in one HA can be earned by another HA subject to HSPO approval and up to the total maximum earnings available for all HAs.

3. Community Based A Systems View



- Treat people in the most appropriate care location
- Deliver the highest quality of care
- Ensure effective use of resources
- Emphasize scalability of services

Avoidance of Unnecessary Residential Care and Acute Admissions (AURAA)

- A comprehensive set of community-based services designed to provide proactive care to prevent exacerbation of known complex disease
- Will prevent avoidable ED, Acute and Residential Care admissions and reduce LOS amongst the population at highest risk, while improving overall health status at home
- 118 patients enrolled across 6 communities in VCH
 - All 118 patients were waitlisted or eligible for residential care
 - 92% of these patients are still in the community and have not had to be admitted to residential care
 - Early success is being seen with health outcomes (eg lowered MAPLE and CHESS scores for select clients)
 - Due to intensive care management, patients have been stabilized and require less resources enabling support at home

of RC Registrations (Total) by Fiscal Year (P11 YTD) Vancouver



Impact of the AURAA Program on Reducing ALC in Richmond

- The number of ALC clients in acute care has dropped from 40 to 24 on average on any given day
- The number of ALC days have dropped from 937 days/period to 691 days/period
- 800 ALC days saved at Richmond Hospital YTD
- Many AURAA clients have foregone Residential Care facilities when offered all together, as they have improved and function well with family and Home Health services combined

P for P can Lead to Better, Earlier Discharges: Home First



Home First: Successes

- Established regular meetings with acute and community care staff
- Starting to see a shift in culture
- Decreased the trajectory demand from acute to residential care placement
- Reduced the number of ALC days in acute care
- ALC clients that moved home stay home

4. Procedural based care

- Surgery funded at usual costs
- Other procedures funded at marginal costs (MRI)

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- Surgery funded at usual costs
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MRI Wait Times



P4P to reduce wait times: Learning

- Try to choose area where the new costs are marginal:
 - CT/MRI/Interventional Radiology (shift changes/ other efficiencies)
 - New organizational efficiencies (OR scheduling and pre/post op planning)
- Must include the MD costs!

5. Seeding Quality

 Thesis: improve overall surgical outcomes by joining the American College of Surgeons' National Surgical Quality Improvement Project

Before



After



II. Don't Pay for What you Don't Want Using negative incentives



Negative Incentives

- BC government had instituted a negative funding option based upon agreed upon wait times for federalprovincial targets on surgery: If negotiated targets are not met by December 31,funding is withheld for a percentage of the cases
 - Primary Hip and Knee replacement surgery
 - Cataract surgery
 - Non emergent cardiac surgery



Don't Pay for What You Don't Want in Acute Care

- No accountability on quality:
 - Post operative infections
 - Re-admissions
 - Prolonged length of stay
- No accountability on access
- No accountability on integrated outcomes
- No accountability on total cost of care

Don't pay for what you don't want

- Readmissions:
 - Mental Health Patients
 - Surgical patients
 - Medical Patients
- MRSA Infections/Hand washing
- C. difficile infections
- Urinary tract infections

Mental Health and Addictions Readmissions

- Indicators:30 day mental health readmission
- Benchmark: CIHI: 11.4/100,000
- VCH 15.7/100,000
- VCH excess=4.3/100,000 x 10 = 43 cases
- Cost/readmission= LOS x \$/day = 13 x 736 = \$9,568
- Total cost = \$ 411,424
- Etc. for surgery and medical readmissions

Cost Evaluation



VCH spent more than \$ 65.2 M for the treatment of the **selected** HAIs over the last 4 years

Proportion



• UTI, Bacteremias and VRE are the main cost drivers and responsible for almost 70% of costs concerning HAIs

UTI Cost-Analysis

		Cost spent for UTI at VCH (VGH, RH, LGH)*				
Year	Number of Infections	Low Cost	High Cost			
2006/07	9,600	\$ 8,275,200	\$ 9,667,200			
2007/08	6,600	\$ 5,689,200	\$ 6,646,200			
2008/09	6,000	\$ 5,172,000	\$ 6,042,000			
2009/10	4,000	\$ 3,448,000	\$ 4,028,000			
2010/11	2,300	\$ 1,982,600	\$ 2,316,100			
Total Costs/Savings VCH (VGH, LGH, RH)	28,500	\$24,567,000	\$28,699,500			

UTI at VCH

- Average LOS = 16.74 days
- Expected LOS = 11.82 days
- Extended LOS = 4.93 days

* Costs are based on Zoutman study

MRSA and Hand Hygiene



Further research is necessary to prove and evaluate the impact of HH on a reduction of infection rates

Decision Making in a Democracy



 Take "impossible" decisions out of hands of politicians

 Four Year Cycle leads to emasculation of politicians and the decision making process







"Economist Don Drummond has accomplished what government could never do: <u>Lay out all the</u> <u>province's economic options</u>" Globe and Mail Feb 16 2012



You can take a horse to water but can you make it drink?

Patient Focused Funding Period 7 YTD Earnings Summary for VCH

					ED P4P				
(*	Ρгο	cedural			funded by				
(\$ million)		Саге	Co	mmunity	HSPO	Total HSPO			
	Pr	оgгат	Рг	ograms ²	(New Floor)	Funding			
Vancouver		0.717		0.354	2.560	3.631			
РНС		1.305			1.625	2.930			
Coastal		1.352		0.114	0.912	<mark>2.378</mark>			
Richmond		0.750		0.084	0.728	1.562			
MRI (P6 YTD)		1.221				1.221			
Regional				0.005		0.005			
NSQIP ¹		0.996				0.996			
Total VCH	\$	6.342	\$	0.557	\$ 5.825	<mark>\$ 12.723</mark>			
Annual contract	\$	14.63	\$	11.56					
¹ NSQIP - National S	¹ NSQIP - National Surgical Quality Improvement Program								
² Community Progra	ms	(incl. stai	rtu	o funds)					