Provincial Health Services Authority - BC Renal Agency

2002/03 Budget Management Plan ($millions)

	Total
2001/02 Projected Expenditures	35.1
2001/02 Projected "Structural" Surplus/Deficit before restructuring and 1-time costs	0.3
1-time costs	-
Restructuring Costs Recognized in 2001/02	-
2001/02 Revised Projection	0.3

(note: Do not include MOHS's proposed funding to cover this years deficit)

	2002/03		2003/04		2004/05	
	$	FTE's	$	FTE's	$	FTE's
Projected Surplus / (Deficit) Prior to Management Reduction Strategies	(5.9)		(7.9)		(8.7)	
	-					
Management Reduction Strategies:	-					
	-					
Revenue Generation	-					
1. Additional funding from MoHS	0.0					
2. Life support - Renal Tertiary, Drugs	5.6		4.6		4.6	
3. Patient Charges	-					
4. Other	-					
General Efficiencies (non-clinical)	-					
1. Exec/Admin (CEO, direct reports, exec)	-					
2. Shared Services	-					
3. Outsourcing	-					
4. Business Systems	-					
5. Workplace Initiatives	-					
Best Practices (clinical)	-					
1. Alternatives to Care	2.9		3.3		4.1	
2. Clinical Efficiencies	-					
3. Environmental & Protection	-					
4. Bed Consolidations (no access reduction)	-					
	-					
	-					
Program Adjustments/Closures	-					
1. Bed Reductions						
2. Facility/bed conversions						
3. Facility Closures						
4. Program Consolidation	-					
5. Program Reduction	-					
6. Selected Programs	-					
7. Selected Sites	-					
	-					
Total Management Reduction Strategies	8.6	-	7.9	-	8.7	-
Strategies as a % of 2001/02 Expenditures	0.2		0.2		0.2	
Revised Projection Surplus (Deficit)	2.7		0.0		-	

B C R e n a l A g e n c y

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Summary Impact Statement: DIALYSIS SERVICES AND BUDGET CONSTRAINTS

Dialysis services are TRULY life support, as without this therapy , patients die. It is a long term therapy, and without a kidney transplant, patients are forever dependent on dialysis to survive. Approximately 40% of patients are kidney transplant candidates, and of those starting dialysis each year, 10% have failed transplants.

In the current transplant rate era, with 10% per year mortality of dialysis patients, and increasing aging, diabetes and heart disease, the current growth of dialysis is 10% (averaged) over the past 5 years, and does not appear to be lessening.

The accompanying documents and financial projections, in an attempt to reduce costs, describe the actual costs of continuing to dialyze all patients who require that therapy, but do not take into account the associated costs of this patient group (in hospital stay, complications etc). Thus total costs to the health cares system are actually much greater.

The impact of 0 growth in the Renal Budget will result in patient DEATH.
We have attempted to reduce the overall costs, by changing the modality location and type by reasonable amounts, based on accepted national and international clinical guideline. In so doing we can limit the increase in costs, but cannot reduce them to 0, as the population growth is persistent.
Strategies to reduce the growth to 8% per year are being implemented, for longer term savings, but will need 2 years to come to fruition (ie delaying progression to dialysis). Thus, even with best practices, the growth of population will require funding for this life support service to be sustained, outside of the usual envelope.

Please see accompanying document(s) for details.

The BC Provincial Renal Agency has considered the impact of reduction in funding on the quality of care and service workloads. To illustrate, given 10% growth on 2000 persons currently on dialysis, the reduction or unavailability of growth funding would either lead to:

- The death of additional 200 new patients who could receive dialysis therapy (but if no funding, would not receive dialysis, and therefore die)
- Reduction in dialysis therapy or change in dialysis therapy modality in 600 existing patients to ensure some therapy for the additional 200 new patients.

This alternative will lead to increase in utilisation of hospital beds and acute care resources as those patients will be less well. The current average hospital day use for a renal patient is 11 days; we predict an increase to 13 hospital days on average (2000/ppy extra) which will be borne by the individual geographical HA if additional funding is not available, and changes above are instituted. Thus, there will be a shift from outpatient-based therapy to in patient-based therapy or utilisation of acute care resources.

These resources are not under the funding model for BCPRA, but the interface of these patients, with the various HA and institutions would be increased, and therefore that will require budget adjustments.

SUMMARY OF SAVINGS PROJECTS:

Funding 2001/02			$ 83.43M
Population Growth costs	2002/03	$5.89M	
	2003/04	$7.92M	
	2004/05	$8.74M	
Funding requirement by 2005			$105.98
Life Support			($5.58M)
Savings Projects	2002/03	($2.94M)	
	2003/04	($3.34M)	
	2004/05	($4.14M)	($10.42M)
Revised Funding requirement by 2005			$89.98M
Extra Funds required			$6.19
Add Capital costs of implementation			$3.5M
Total Extra Funds required			$9.69M

Savings Projects to include:

- To increase the present ratio of CommunityHD:Incentre of 28:72 to 30:70(2002), 35:65 (2003), 40:60 (2004), 50:50 (2005), giving a total savings at 50% of $2.9M
- To decrease the present ratio of HD:PD of 74:26 to 70:30 (2002), 65:35 (2003), 60:40 (2004), 60:40 (2005), giving a total savings at 50% of $7.9M

The use of 50% savings is a probable attainment goal due to barriers like modalities of patient care, acuity, co-morbidity, processes, systems, protocols, guidelines, attitudes to change.

A Levin Director of BCPRA
J Makwana Head Finance BCRPA
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Redesign Plan Summary.: BC Provincial Renal Agency

The major initiatives/changes planned to improve quality of care to meet budget targets for the the Renal Agency include:

- Acute (inpatient, outpatient, ER):
  - *N/A directly for BCPRA , however, the implementation of guidelines and access are anticipated to reduce hospitalization and ER visits (current estimations = 7-10 day ppy)*
- Continuing Care Community (home support, home nursing, PT/OT, brain injury programs, assisted living, adult day care)
  - NA
- Continuing Care Residential (residential and respite)
  - NA
- Mental Health (inpatient, outpatient, community, and addictions)
  - NA
- Public and Preventive Health :
  - *Strategies to increase public awareness (GP Guidelines, laboratory screening etc) will identify persons earlier which increases probability of delaying or prevention of need for dialysis*
  - *Co-ordinated clinics (early intervention programs) at $1828 ppy , with proposed delay of dialsysis start in 10% of pateints, would reduce total ppy costs from the estimated $34000 for dialysis*
- Corporate
  - *Currently <1% of total Renal budget is spent on corporate affairs*
- Primary Health Care
  - *As above, see PPH*

For each sector use the following headings, where appropriate:

- Revenue Generation
- Administration and Support Efficiencies (non-clinical): e.g. food/laundry service consolidation, shared services in long term care residential facilities, attendance management.
- Best Practices (clinical): e.g. drug utilization, diagnostic laboratory consolidation, specialty service consolidation.
  1. *Co-ordinated evidence based formulary : to be reviewed and updated*
  2. *Streamlining of laboratory testing, and reduction of non useful tests, and revisiting of intervals for repeated testing on chronic pts*
  3. *Guidelines re: drug utilization and other management re-enforced with the use of clinical/ administrative information system*
- Program Adjustments/Closures (clinical): including facility role conversions.
  1. *Increase use of non hospital based dialysis modalities*
     - *Home dialysis (peritoneal and hemodialysis)*

        - *Pre-emptive transplants where appropriate*
        - *Guidelines for dialysis trial and cessation.*
    2. *Fostering of Peritoneal dialysis as option, instead of HD where medically/ clinically appropriate (price differential = $25 000 vs $34,000)*
- Utilization targets by sector.
    1. NA

These headings are consistent with the Budget Management Plan template.

1. Identify the rationale used to determine efficiency measures, utilization targets, and service changes.
    - *Maintain access to appropriate modalities of life support dialysis services within medical/ clinical guidelines, developed locally, nationally and internationally*

2. Quantify impacts of your plan on quality of care and service workloads (scope and volume) including baseline service levels, changes and net levels for each fiscal year.
    - *If current budgets can be maintained, with modifications in implementation as described above, re: scope and necessary 10% increases in patient volumen, the quality of care can be maintained within reasonable levels.*
    - *If no growth monies are available, then DEATH, in patients who would otherwise live, would be the impact*

3. Identify financial implications for each change and reconcile with the Budget Management Plan.
    - *As in accompanying template*

4. State the impact of service changes on health human resources (including physicians).
    - *There is an important need to maintain a ratio of MD's to patients approximately 1: 75-100 per MD for dialysis pts: at the current time we are under-resourced. The increase use of preventative strategies has increased the burden, but would reduce total system cost, if MD and adequate resources for Prevention clinics are made available*

5. Describe the ability of the plan to meet access standards as described in *Standards of Accessibility and Guidelines for Provision of Sustainable Acute Care Services* (BCMOHS, February 19, 2002).
    - *NA*

6. Identify possible requirements for British Columbia Ambulance Service, including changes in number of transports and level of care required by patients.
    - *Beyond mandate of BCPRA< but increasing numbers do have impact on these resources in each HA.*

7. Identify barriers to implementation that may need to be addressed on a provincial level.

- *Lack of nurses, MD's, social workers , dieticians and pharmacists who are essential to the well being and maintenance of health in these patients. Lack of the ancillary support team*
    - *increase Hospital resource use, In hosptial dialysis use*
- *Lack of in hospital resources (eg OR time for vascular access creation or PD tube insertion) would be rate limiting steps to the implementation of appropriate modalities at the appropriate time. Thus, non co-operation of acute care hospitals re: OR time or day surgery beds, will not allow us to meet modality targets.*

8. Identify where planned changes contain uncertainties that present risk to the budget forecast, and possibly to quality of patient services, e.g. costs of demand-driven programs, unforeseen events, and pending litigation. Detail on assumptions of risk and mitigation strategies should be included in both the service and financial plan.
    - ***Risk of not funding the growth will result in death of patients***

9. Provide details of the executive level savings/efficiencies gained by health authority restructuring (including CEO's, direct report positions and executive administrative staff). Include information on any savings/expenses incurred in 2001/02.

10. Provide a summary of planned implementation strategies. This summary should include:

    - ***Strategies to facilitate program and service changes.***
        -
    - ***Communications strategies***
        - ***Network of renal communities around the province***
        - ***Newsletter***
        - ***Website.***
    - ***Anticipated timing for implementing major changes.***
        - ***2002***
    - ***See accompanying document for details***

II

B C R e n a l A g e n c y

IMPACT OF ANY CHANGES TO THE FUNDING PROCESS TO THE RENAL HEALTHCARE

The BC Provincial Renal Agency is responsible for ensuring that adequate funding required for patient growth is available. These monies are allotted to maintain current service levels and planning for facilities and allotted capital and equipment funding. Any changes will lead to inability to provide life-sustaining care for patients with Kidney disease. All the current funding for Renal services is maximized directly to patient care related activities.

The proposed assumption that there is no extra funding for Life support Renal service growth for 2003/04 and 2004/05 set at 10% for each year, will lead to impact on acute services including hospitalizations and emergency rooms. The BCPRA has project proposals and long term efficiency drives that may provide partly the resource requirement for the growth. It is estimated that there will be a reduction of 2% of the growth costs in 2003/04 and 3% in 2004/05.

Present process:

The present funding for Renal Replacement Therapy is based on funding formulae per patient years by modality of Renal care. These monies are allotted to regional regions based on patient registration and reconciliation through our provincial information system. Monies are accounted for both in each region, by patient year, and in total. Issues related to movement of patients between regions are dealt with centrally, and all accounts reconciled for where services are rendered.

It can be seen that the average patient growth over the past five years is 11.5% (see the attached appendix - History of patient growth from 1996 to 2001). A growth rate of 10% is used for the projections for Financial impact for the three years to 2005.

In the past the funding has flowed with the increase in occurrence of Renal disease.

The formulae of funding per patient are:

Hemodialysis – Incentre	$ 34,099
Hemodialysis – Community Dialysis Unit	$ 15,526
Home CAPD Program	$ 16,000
Home Cycler Program	$ 25,900
Home Hemo Program	$ 16,080
Nutritional Supplements (80% of Patients)	$ 372
Erythropoetin	$ 6,115

Renal Medications	$ 783
Community Clinic Supplies	$ 11,100
Predialysis (PRI)	$ 1,828
Peritoneal Dialysis (PD)	$ 3,306

Staff reductions (FTE) to Administration budget BCPRA

The staffing of 15FTE's for the BCPRA Administration is allocated between Finance, Data and Information systems and clerical support who provide the Province wide services, which ensure appropriate planning, distribution and maintenance of care models. The services include funding projections and allocations for operational budget for $84M (2001/02) and capital replacement and growth and expansion of services with facility planning. The IS department provides the Renal community all patient related data for decision making purposes, as well as outcome measures by which to measure performance(s).

Any further reduction in the staffing will lead to drastic reductions in these services and will have a very negative effect on all the work already accomplished and future plans for the Renal community.

In addition, BCPRA acquires the accountability for the Provincial Renal Tertiary services requiring added resources to maintain responsibilities to a standard mandated by PHSA.

Access to care and services and quality of care and services

The available patient care services and the resource allocation has not kept up with the chronicity of renal patient populations and the progression of renal and other diseases and there is a need to implement proactive programs to reduce the increasing epidemic of renal disease.

There is inadequate capacity especially in the Lower Mainland and some patients are receiving unsafe care in that they are not being dialysed three times a week as per a clinical standard. Patients who need Hemodialysis are being kept on Peritoneal dialysis with a resulting deterioration in patients' health.

Hence there are problems with regards to accessibility to:

- Adequate level and standard of care
- Care at facility of choice
- Appropriate modality of care
- Appropriate access to support services like OR time for vascular access, Dietary and physiotherapy

The present method of funding allocation does not take into account the acuity of patients and the Incentre units end up providing all the support services to the community units which are not funded for the support infrastructure.

Since the prevalence of Renal disease is driven by growth in population of all ages, it would be impossible to cap resources in monetary as well as human. There is a disproportionate increase in Renal disease in the patients with Diabetes and patients who survive Cardiac diseases.

Proposal

A. To maintain current level of funding for all aspects of Renal services

B To enhance the delay of patients progressing to Renal Replacement Therapy by optimizing their care in a cost-effective way.

Hence to optimize care of patients and achieve optimal use of available resources, it is proposed by BCPRA to continue to advocate for multidisciplinary clinics with clinical care, education and information services available to patients. These organized formal clinics structured with protocols in place for regular visits for all modalities of care including PD, lab work, counseling and referral to community agencies will ultimately reduce the epidemic growth (> 10% per year), and thus reduce overall costs of renal care over the next 3 years. . All of these aspects can be measured:

- Delay progression rates of kidney disease
- Prevent complications (reduce hospitalization days per patient year)
- Emphasize wellness
- Demystify dialysis: choose cheaper home based therapies
- Dialysis modality selection based on best fit for patient and family
- Dialysis access planning (reduced urgent Operating room time needs)
- Transplant referral and donor identification (avoid dialysis and obtain transplant)
- Promote optimal nutrition (reduce need for ancillary health care services)
- Promote Home based dialysis including Nocturnal Dialysis (Pilot project being undertaken at Vancouver General Hospital). The present proportion of self-care patients in the Renal population is 27% and it is proposed to increase this number by 10% per year. This frees up expensive Incentre and community dialysis units and enhances qualltiy of life for the patients. This will not only eleviate capacity problems but decrease costs of treatments.

Proposed Outcomes

A Provision of optimal and timely care and Renal Replacement Therapy

B Delay of progressive Renal disease in 10% of patients who would otherwise be on costly dialysis treatment

It is well established that organized multidisciplinary clinics for patients with progressive renal disease will result in:

- Improved care of patients

- Reduced incidence of urgent start dialysis, including need for temporary access and use of expensive direct care resources
- Reduced hospitalization (incidence and duration)
- Improved ability to plan for Renal Replacement Therapy resources in each region
- Better use of resources where required
- Cost benefits as with the delay in progression of disease, the highly costly hospital based hemodialysis is delayed, leading to a reduction in costs from $34,000 to $3,000
- Increased Home Hemo and Nocturnal Dialysis programs with the community infrastructure in place and reduction in the highly costly resource requirements at a large dialysis centre
- The changes proposed in treatment protocols will also reduce the need for capital expansions and equipment growth at a rate required to sustain the present growth in Renal patient population

Business cases for innovative projects to be prepared by BCPRA (some in conjunction with public/ private partnerships):

1. Nocturnal Dialysis project (business case prepared and approved, implement April 2002, duration of project – 1 year).

2. Home / self care program. Use public/ private partnership to provide facilities for training and where necessary providing limited support to patients using facility for self-dialysis.

3. Set up early intervention programs like Predialysis clinics for population prone to Renal disease.

4. With the assumption that the Tertiary funding for Renal will flow through BCPRA/ PHSA, opportunity for province wide contracts for expensive medications (Erythropoeitin), Dialysers, Nutritional supplements and other shared services within the PHSA organization.

5. Possibility of funding for Indirect care for Renal patients like access to surgery (for Vascular access), Rehab therapy etc to be redirected to BCPRA – opportunity to prepare standards and guidelines for Renal Replacement Therapy planning.

Health Service Redesign Plan
Current and Proposed Service Levels

RENAL

INDICATOR	Utilization/Workload				% Change	% Change	Target as Identified by HA		
	Fiscal Year:			2001/2002	98/99 to	99/00 to	Fiscal Year:		
	1998/1999	1999/2000	2000/2001	Projected Year End	99/00	00/01	2002/03	2003/04	2004/05
Patient Years									
Hemodialysis	982	1,155	1,339	1,400	18%	16%	1,550	1,700	1,870
Predialysis	911	1,002	1,102	1,770	10%	10%	1,950	2,140	2,360
Peritoneal Dialysis	412	459	565	480	11%	23%	530	580	640
Visits									
Hemodialysis	153,192	180,180	208,884	218,400	18%	16%	241,800	265,200	291,720
Predialysis	142,116	156,312	171,912	276,120	10%	10%	304,200	333,840	368,160
Peritoneal Dialysis	64,272	71,604	88,140	74,880	11%	23%	82,680	90,480	99,840
Total Visits	359,580	408,096	468,936	569,400	13%	15%	628,680	689,520	759,720