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*Analysing Shared Service Contracts:
The Case of Food Services for Winnipeg Hospitals**

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June 17, 1999

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Executive Summary

In November 1994, Winnipeg's nine urban hospitals announced that they agreed to "pursue opportunities to share four common support services - food services, material management, biomedical waste disposal and laundry to determine the potential for improving efficiency, reducing duplication and increasing buying power." A new non-profit organization called the Urban Shared Services Corporation (USSC) was created to manage the shared functions. USSC is to be directed by a 16 member board, 9 CEO's of each hospital, a Winnipeg Hospital Authority representative, a representative from USSC as well as 5 appointed members from the private sector.

The *Shared Food Services Patient Food Service Agreement* signed June 27, 1997, involves four parties, the Urban Shared Services Corporation, Newcourt Capital Inc., the Winnipeg Hospital Authority, and each hospital (which are nine in number). Also involved, but not party to the above contract is VERSA Food Services (now called Aramark Canada, Ltd.) who was awarded a five-year contract to provide expert consulting and contract management services. The company was involved in the design and implementation of USSC's food service system and since October 1997 has been supplying management staff to oversee USSC operations and employees. In the *Shared Food Services* contract, Newcourt Capital is to provide long term financing for the construction of a receiving and distribution unit to accommodate the provision of patient food services by USSC for each of the hospitals. Each hospital agreed to acquire its total requirement of patient food services and related management services through USSC for a period of 20 years, (USSC's project amortization period). Also party to the contract is the Winnipeg Hospital Authority, a corporation created without share capital on January 6, 1997, whose role is to allocate resources to and organize the delivery of hospital and other health services within the City of Winnipeg.

The main arguments that have been advanced for the change in food service delivery are that (i) savings will result from nonrefurbishment of hospital cafeterias, (ii) lower operating costs can result from a central plant operation, and (iii) savings can be achieved through a reduction in losses on non-patient food services. An analysis of these issues suggests that given that a majority of hospitals have chosen to retain their cafeteria services for non-patients, the proposed \$2.6 million savings from (iii) should not be attributed to the *Shared Food Service* system. Of the remaining 3.3 million in proposed savings, the realized amount depends on the number of hospital cafeterias that need renovating, as well as the cost of refurbishment, as well as the expected economies of scale of the single plant operation. Given the range in estimates on the respective costs of renovation versus the cost of the central facility, savings on financing costs may not be realized. Evidence of economies of scale for central food services remains unclear, implying that additional savings from the central facility might not materialize. The *Shared Food Service* contract also brings with a number of contractual issues that might undermine the goals that are sought in the contract.

Apart from these issues, a full comparison of the present system versus the *Shared Food Service* approach involves subtracting from the proposed savings the loss in labour premiums to laid off workers, as well as any losses that might be incurred by Manitoba businesses if the food sourcing is shifted from Manitoba firms. Finally, the central issue of the respective quality of meals in the two systems remains unresolved. Given all these factors, there is considerable doubt whether the proposed change in hospital food service delivery will yield real benefits to Manitobans.

1.0 Introduction

The issue of health care costs has been front and centre in the development of health care policy in the Province of Manitoba. Faced with limited funds from higher levels of government, health care officials have responded by searching for alternative delivery systems. Almost every area of the health care system is under scrutiny, from home care to the procurement system of hospitals. A 1987 survey of Canadian hospitals found that eighty-four percent of Canadian hospitals shared at least one service with another hospital.¹

This study examines this issue in the context of one proposed program to alter the nature of the health care delivery system, the setting up of a joint system of food preparation to provide food for hospital patients in Winnipeg hospitals. The proposed system is analysed from both a general perspective, examining the nature of the contract that is in place as well as the economics of the project. The latter details the expected net benefits of the proposed *Shared Services* contract, and contrasts the proposal with the existing system, and possible alternatives. The economic analysis of the proposed system discusses issues regarding the proposed benefits of single plant operation, as well as issues in the likely effectiveness of the contract in ensuring contractual performance. The study outlines a framework for how policy changes are evaluated in standard cost-benefit analysis, and discusses how the net benefits of the proposed system would be affected by a wider examination of the net benefits to Manitobans from the policy change.

2.0 The Contract for Shared Food Services: Background

In November 1994, Winnipeg's nine urban hospitals announced that they agreed to "pursue opportunities to share four common support services - food services, material management, biomedical waste disposal and laundry to determine the potential for improving efficiency, reducing duplication and increasing buying power."² A new non-profit organization called the Urban Shared Services Corporation (USSC) was created to manage the shared functions. USSC is to be directed by a 16 member board, 9 CEO's of each hospital, a Winnipeg Hospital Authority representative, a representative from USSC as well as 5 appointed members from the private sector. It was stated at the time that the joint system was to be phased in over six years, and it was announced that the changes being considered were "in service areas behind the scenes, not in direct contact with patients and their families".³ At the time, hospitals shared some services such as laundry services and biomedical waste disposal while each hospital had its own food preparation facilities, product purchasing and warehousing.

The proposal was strongly endorsed by the hospital administrations and the provincial government who stated "we have been working closely with the urban hospitals group and commend them for the

¹ Markham and Lomas (1995:5). In Ontario, the percentage of services shared was laundry (47%), laboratory (44%), dietary (15%), purchasing (16%), pharmacy (12%), consulting medical staff (49%), medical laboratories (49%), X-ray (46%), medical education (19%) and active medical staff (17%).

² The hospitals are Seven Oaks, Health Science Centre, Grace, Deer Lodge, Concordia, Victoria, Riverview, Saint-Boniface General Hospital and Misericordia.

³ News Release, November 24, 1994, Nick Kalansky, President of Seven Oaks General Hospital and the urban hospitals chairperson for the shared services project. In the press release, it was also stated that preliminary studies "have shown there are potential annual savings as high as \$16 million." Mr. Kalansky also reported that "the cost/benefit studies involved eight committees encompassing 24 sub working groups made up of about 200 staff from the nine hospitals."

cooperation and creativity demonstrated in establishing this shared-services initiative to help Manitoba maintain its quality health care system. These changes would help us to ensure that more of our available health dollars are used for direct patient care”.⁴ It was also reported that it has been demonstrated that “sharing hospital support services in other jurisdictions has been successful in improving efficiency and lowering costs. We’re sure it could be equally successful here.”⁵

Requests for Proposals were solicited from private companies to provide shared food services for the nine Winnipeg hospitals. In the proposal, USSC was seeking a minimum 50% investment in the total capital costs of the system from the private sector. At the end of the contract term, all assets would revert to USSC (KMPG, 1996, p. 2). Interested parties could submit proposals under any or all of the following partnership models: Model A would involve the development, financing and operation of the system; Model B1, would involve the development and financing of the system infrastructure, in partnership with a Model B2 company who would operate the System under a Management contract.

The *Shared Food Services Patient Food Service Agreement* of June 27, 1997 contract involves four parties, the Urban Shared Services Corporation, Newcourt Capital Inc., the Winnipeg Hospital Authority, and each hospital (which are nine in number). Also involved, but not party to the above contract is *Aramark Canada Ltd.* (formerly *VERSA Food Services Ltd.*) who was awarded a five-year contract to provide expert consulting and contract management services. The company was involved in the design and implementation of USSC’s food service system and since October 1997 has been supplying management staff to oversee USSC operations and employees. In the *Shared Food Services* contract, Newcourt Capital is to provide long term financing for the construction of a receiving and distribution unit to accommodate the provision of patient food services by USSC for each of the hospitals. Each hospital agreed to acquire its total requirement of patient food services and related management services through USSC for a period of 20 years, (USSC’s project amortization period). Also party to the contract is the Winnipeg Hospital Authority, a corporation created without share capital on January 6, 1997, whose role is to allocate resources to Winnipeg hospitals and to organize the delivery of hospital and other health services within the City of Winnipeg.

The USSC’s facility is a \$21 million, 34,000 square foot Regional Food Distribution Facility (RDF), currently the largest of its kind in North America. Construction began in September 1997 with the facility becoming operational in August 1998. The facility will require 84 full time equivalent positions who will be required to prepare up to 8700 meal trays per day for member hospitals.⁶ USSC estimates that the entire hospital meal-delivery system will require 252 fewer equivalent full time positions; 182 of this reduction will come from patient food services while 70 will come from non-patient food services (cafeteria and retail sales).⁷ The diagram provided by USSC describes the Food Handling System model that is to be adopted. Most of the food will be bought in bulk, prepared and delivered chilled or frozen to the Regional Distribution Facility (RDF). Employees will then assemble the meals on trays at the RDF, load them on to special transport racks where they will remain chilled until delivered three times a day to the Receiving Centre of

⁴ Health Minister Jim McCrae, Winnipeg Urban Hospitals News Release, November 24, 1994.

⁵ Nick Kalansky, president of Seven Oaks General Hospital, Winnipeg’s Urban Hospitals News Release, November 24, 1994.

⁶ A meal tray per day is defined as involving three meals, breakfast, lunch and supper.

⁷ There are currently 416 positions in patient food services, and 194 in non-patient food services.

each of the nine hospitals. The racks are placed in specially designed rethermalization carts, where they remain chilled until about one hour before required where the food designed to be served hot is heated. The food trays and rethermalization equipment are designed to separate hot and cold food. The trays are then distributed to patients in the hospital wards by hospital workers. The empty meal trays are then returned to Hospital Receiving Centre where they are picked up by USSC and returned to the Regional Distribution Facility for cleaning and inspection.

3.0 The Estimated Financial Costs and Recoveries of the Present and Proposed System

(i) The Present System

For the budget year 1996/97, the total operating costs of food services for the nine Winnipeg hospitals was approximately \$29 million (Appendix 2).⁸ Of those costs, approximately 25 percent are recovered, 21 percent through cafeteria charges and other vending services for non-patients, and 4 percent through patient related recoveries.⁹ Thus, approximately \$22 million is the estimated annual net cost of food services for Winnipeg hospitals.¹⁰

Regarding the output of the system, in 1996/97 approximately 1.7 million meal days were provided, with approximately 70% (1.2 million) being provided for patients and 30% for non-patients.¹¹ If we attribute 70% of the total operating costs of \$29 million to patient meals, this amounts to roughly \$20.3 million.¹² If the remaining 30% of the total operating costs is attributed to non-patient meal costs, we obtain a total operating cost of approximately 8.7 million dollars which is close to the amount reported in Appendix 6 (\$8,770,236). Total non-patient recoveries for 1996/97 are approximately \$6.4 million (Appendix 4), with the difference approximately \$2.3 million which is reported in Appendix 7. This is the estimate of the current deficit on non-patient food service.

(ii) The Proposed System

Under the proposed system, the total annual food costs for patient services would be reduced from 20.2 to 16.9 million, or 3.3 million, a 16.3 percent reduction. In reducing these costs, the total number of equivalent full time positions (EFTs) for patient food services would be reduced from 416 to 234 or a reduction in 182 positions, a 43 % reduction.

Under the proposed system, the deficit on non-patient meals of 2.3 million is to be converted to a surplus of approximately \$270,000. This would be achieved by reducing total operating costs by 22%, with total labour costs including benefits being reduced by approximately 2.2 million or 40% of current total operating

⁸ Request for Proposal (USSC) Data Package, prepared by KPMG, July 29, 1996.

⁹ St. Boniface and Health Sciences Centre account for approximately 50% of total operating costs, and contribute approximately 60% to patient and non-patient related recoveries.

¹⁰ This is close to the estimate of \$22.6 million estimated by USSC, see Appendix 9.

¹¹ There is some variation in how meal days are provided, trayed versus bulk, as well as dietary restrictions.

¹² This is close to the 20.2 million reported in Appendix 7.

costs, with food costs increasing by approximately 260 thousand, or increasing by 10%. The reduction in labour costs would be achieved by reducing the number of EFT (Equivalent Full Time) positions by 70 (194-124), or 36%.

The summary of expected savings of the proposed system is then equal to an improvement of 2.6 million on non-patient services and 3.3 in patient services, a total of 5.9 million (Appendix 7).¹³

4.0 An Alternative Food Service Model: A Hybrid System

Apart from the Status Quo situation, or the *Shared Food Services* contract, an additional possibility that was explored was some combination of the two situations. This was the option recommended by the consulting firm *Food Management Consultants Ltd* in their report submitted July 1993 to the Steering Committee of the Winnipeg Urban Hospital Council charged with assessing the feasibility of centralized food services. Some highlights of the report are the following.

- Their assessment indicates that annual operating costs could be reduced by \$4.6 million by developing a shared food service for Winnipeg/Brandon, \$3.3 million for hospitals and \$1.3 for Personal Care Homes.
- Estimated savings are lower for Winnipeg/Brandon due to the relative efficiency of the current food service system which was estimated at \$300-\$600 less per bed per year than in Ontario. The low cost nature of the food service costs for Health Science Centre and St. Boniface is supported by the HayGroup Consultants who compared the food service costs for a cross section of 20 hospitals in Canada. They show that both HSC and St. Boniface were both above the median in terms of cost efficiency, with the HSC having the lowest food service costs of the 20 hospitals surveyed.¹⁴
- They proposed a 60/40 split between the amount of food items that could be procured versus the amount that could be produced at a Food Production Centre.
- The most cost effective system is to build, own and centralize production facilities to meet 40% of the prepared food requirements and procure or source from the private/public sector the remaining 60% of the required food. This option includes centrally assembling into trays requirements for up to 2,200 beds. For this option, the capital costs are estimated to be \$25.4 million.
- A range of savings of between 700,000 and \$1.3 million are possible by applying a business oriented collaborative approach to managing the cafeteria services at the hospitals.
- As of 1992-1993, revenues from cafeterias and catering have been reduced due to fewer staff in the hospitals and the effects of the recession.

¹³ The 2.63 million improvement results from turning the 2.36 million deficit to a .27 million dollar surplus.

¹⁴ HayGroup (1997;74).

- There is great economic value attainable by transferring much of the food manufacturing required by the health services sector to the ready food marketplace in Manitoba.

A number of these issues will be addressed in the context of discussing a number of economic issues regarding the contract for shared food services.

5.0 The Contract for Food Service Provision: Economic Issues

A number of arguments have been advanced by governments or public officials to alter the nature of the services provided by the public sector. Some feel that the continued provision by the public sector would require a substantial reinvestment in capital and equipment, which for one reason or another, the government is unwilling or feels is unable to undertake with public funds. Others pursue contracting out based on a belief that the good or service can be provided more cheaply by the private sector.¹⁵ The proposed centralized food service plan has elements of both of these reasons.¹⁶ Two central issues are the proposed cost savings that would result from the nonrefurbishment of the existing hospital food cafeterias, and the cost savings that result from centralizing food service preparation in a single facility. These are examined in turn.

5.1 Proposed Cost Savings from Non Replacement of Hospital Cafeterias

A major reason given for the centralized food service plan is that it eliminates the need for the renovation of the hospital cafeterias in a number of the affected hospitals.¹⁷ Data provided by USSC suggests that the capital outlay to rebuild hospital kitchens at all Winnipeg hospitals would equal \$36.1 million, which would result in annual financing costs of \$4.5 million (Appendix 9). The capital outlay to build the shared food services is estimated by USSC to be \$23.7 million. In contrast to these estimates, the consulting firm *Food Management Services Ltd*, who was asked to investigate the feasibility of a shared food services by a hospital steering committee, estimated in 1993 that the capital costs of hospitals to meet their requirements over the next 15-20 years were \$29.8 million while the comparable costs for a Food Production Centre to produce 100% of the prepared food requirements was \$28.1 million.

It is interesting to comment on the cost of financing the project through Newcourt Capital. Using the estimates provided by USSC in Appendix 9, in exchange for the \$23.7 million dollar loan, the contract calls for the hospitals to make annual mortgage payments to Newcourt of \$2.8 million for twenty years, which is

¹⁵Privatization is defined as the selling of previous government owned assets to the private sector, effectively transferring production of the good and service from public control to private control. It can include circumstances where the public sector solicits bids from the private sector to provide services previously provided by the public sector requiring the construction of new assets. In this case, the responsibility is transferred but assets are not transferred, which is sometimes called *contracting out*.

¹⁶ Technically, the proposed change involves a change in management, in which the responsibility for providing the patient food services is now managed by *Aramark Canada Ltd*. rather than hospital administrators.

¹⁷ As of June 1993, Health Sciences Centre, Victoria General Hospital, the Winnipeg Municipal Hospital and the Brandon General Hospital had submitted capital planning projects for food service facility redevelopment to Manitoba Health for funding (*Food Management Consultants Ltd* (1993:8)).

the amortization period. Using a standard annuity formula, this implies an annual interest rate of approximately 10.5%.¹⁸ Only USSC rather than the individual hospitals will be asked to mortgage and encumber its assets in favour of Newcourt.¹⁹ One legal opinion is that an important part of Newcourt's security will be the assignment or transfer of all or part of each hospital's payment to USSC for food services to Newcourt.²⁰ To ensure that the payments are forthcoming from the hospitals, USSC has ensured that even if the centralized facility "has not become operational by the expected date, the Hospital shall nonetheless be invoiced by USSC for its share of Fixed Costs..".²¹ Furthermore, "if at any time during the term of this Agreement, any or all of the anticipated Patient Food Service may not be able to be provided by USSC, the Hospital shall nonetheless pay to USSC its Pro Rata Share monthly on the first business day of each month".²²

The obvious alternative to private financing would be for the public sector to borrow directly from the public. The difference is that the loan is secured by the assets and income generating ability of the Province and the risk pooling and risk spreading advantages available to a large and diversified borrower like the Province. However, to the extent that the risk cannot be diversified away, it may raise the total risk to the Province. In general, because of the guarantees provided by governments, their borrowing costs are considerably lower. For example, the following in brackets are the benchmark 20 year interest rates that existed in the months preceding the June 1997 contract date: March 17 (7.34); March 24 (7.40); April 7 (7.62); April 14 (7.57); April 21 (7.41), May 5 (7.20), May 20 (7.19). The interest rate that the Province of Manitoba paid on funds borrowed for 20 years on June 2, 1997 was 7.18%.²³ The difference in borrowing costs facing the Province versus USSC is significant. For example, even if USSC's cost estimate of \$36.1 million to renovate all the city's hospital cafeterias is used, the annual interest cost would be \$3.40 million at a 7% rate, and \$3.67 at an 8% rate, considerable less than USSC's estimate of the \$4.5 million annual financing cost.²⁴

An additional argument given for financing the project using the private corporation, Newcourt Capital, was that this approach does not involve the use of scarce public sector dollars to construct and maintain the

¹⁸ See Appendix 9.

¹⁹ Letter from D'Arcy & Deacon, Barristers and Solicitors, to Joseph Shiel, Chief Executive Officer, Urban Shared Services Corporation, June 13, 1997. The letter also states that "the refusal of even one Facility to honour its contractual commitments for food services with USSC may jeopardize not only the Shared Food Services Project but also USSC itself."

²⁰ D'Arcy & Deacon, June 13, 1997.

²¹ *Shared Food Services Patient Food Service Agreement*, June 27, 1997, p.7.

²² *Shared Food Services Patient Food Service Agreement*, June 27, 1997, p.7.

²³ Department of Finance, Manitoba. It is important to note that borrowing by Crown corporations is undertaken by the Province, which charges an additional .25% to borrowers, the total rate being the Crown Corporation Rate.

²⁴ The annual difference in interest costs from borrowing at even an 8% government interest rate versus the 10.5% rate charged to USSC, is approximately \$400,000 dollars, yielding a total difference in interest costs over the 20 year period of approximately \$9 million dollars.

facility. As can be seen, given the structure of the contract, the primary obligation for payment to fund the financing costs rests with the individual hospitals. Whether the public sector is ultimately involved depends on whether USSC and Newcourt believe that Manitoba Health would ensure that the individual hospitals meet their purchasing obligations from USSC. If so then the ultimate liability rests with Manitoba Health and indirectly the Province. If not, then the decision to use USSC as the vehicle to borrow the funds, means that the project transfers the liability resulting from the financing of the facility from Manitoba Health (where it would be if the facility was publicly financed) to USSC and ultimately to the hospitals (who must make financing payments to Newcourt out of hospital charges). However given that the hospitals obtain funding from the Provincial government through Manitoba Health then the liability of the public sector may be ultimately unchanged in the two circumstances. Only if the public sector was not being charged for the *construction costs* could one state that the public sector avoids the use of scarce public sector dollars in either scenario.

5.2 Proposed Cost Savings from a Single Plant Operation

A second major reason given for centralizing hospital food service provision has been advanced by the Chair of USSC who stated “our goal is to utilize economies of scale to heighten efficiencies and deliver true savings in the delivery of support services.”²⁵ Economies of scale exist when large scale production can result in lower average costs of production. For example, if there are substantial fixed costs, then it may be cheaper to have one firm provide the good or service than a number of smaller firms, which is the result of declining average costs of production.²⁶ Essentially, the fixed costs can be spread over a larger number of units produced and sold, which lowers average cost at which the good can be provided.²⁷ In this case, efficiency dictates that only a single firm operate the facility.

Is there evidence of economies of scale for shared patient food services between hospitals? Studies that are publicly available on this issue are scant. In looking at economies in multi-hospital arrangements in general, Markham and Lomas (1995:9), state that “the literature has been mixed, however, with respect to economic benefits, with the US data suggesting that there may be diseconomies of scale.” A paper that investigates the issue of economies of scale for the conventional food system in the Province of Quebec is Lauzon and Poirier (1995) from the Accounting Department of the Universite du Quebec a Montreal. Among their findings is “that the advantage gained from a high production volume declines considerably as soon as the number of meal-days is greater than 15,000 meal days per year, which is the production rate of very small institutions.”²⁸ Lauzon and Poirier’s analysis shows that per unit costs reach a minimum when the

²⁵ Derek Johannson, *Newscom: An Urban Shared Services News and Communication Periodical*, November 1997, p.1.

²⁶ When the lowest cost market structure is a single firm, this is called a *natural monopoly*.

²⁷ For example two firms each with their own fixed costs may be able to produce a good at an average cost of \$10.00 while a single firm with twice the output and only one fixed cost or plant may be able to produce it at a cost less than \$10.00.

²⁸ According to Lauzon and Poirier (1995:7) the average hospital serves about 100,000 meal days per year. Among their other findings was that the cost per unit of meals in the privatized food service departments was on average \$2.25 higher than the cost per unit in comparable state run departments.

number of meal days per year reach 100,000.²⁹ Appendix 3 shows that all Winnipeg hospitals served more than 100,000 patient and non-patient meal days in 1996-97. It appears that all Winnipeg hospitals are operating at a relatively efficient scale using the conventional food service system. The question that remains is what are the economies of scale that can be achieved from the *Shared Food Service* system that is being proposed. No empirical evidence has been released which indicates what is the optimal scale of such a system.

Suppose it is granted that the *Shared Food Service* system is at the scale at which minimum average costs can be achieved for the patient food services at Winnipeg hospitals. In a world where there are economies of scale, there are essentially four possible options.³⁰ Each option brings with it strengths and weaknesses in allocating resources. The first is public ownership and public provision. In this case, the public manager is instructed to produce the output which is consistent with efficiency, in this case where price equals marginal cost of production. With falling average cost of production, this means that price (p) will be *less* than average cost (ac) which would warrant a *subsidy* equal to $(ac-p)q^*$ where q^* is the output where the demand curve intersects the marginal cost curve. Where there are economies of scale, efficiency is not consistent with break even operation. Critics of this approach argue that the incentive to control costs for public managers is weaker than the corresponding incentives for private firms. Supporters argue that in cases where it is difficult or costly to monitor the private firm's contractual performance, public operation may be preferable.

The second possibility is private provision with government regulation. This is essentially the contractual solution with the allowable price, service and rate of return being determined by a regulatory board. This type of regulation is not without cost, involving substantial monitoring and possible efficiency losses, where the firm may wish to pad its capital base to get a higher rate of return than is consistent with efficiency. Price in this case is set equal to average cost, which is higher than marginal cost which means that some efficiency is sacrificed unless an explicit subsidy is paid to the private firm. If firms know a subsidy will be paid based on their reported costs, then there is an incentive to overstate their average costs of production, which will bring forth a larger subsidy than is required.

The third possibility is private provision with no regulation. This is generally seen as the worse possible outcome with profit maximization leading to a higher price and lower output than is consistent with efficiency.

A fourth possibility is public ownership and private provision. In this case, the public sector owns the asset and contracts with a private firm to produce the good. If there is no collusion at the bidding stage and sufficient number of bidders, then the public sector can allow the firm that submits the *best* proposal to use the facilities, which it would lease from the government. The contract can also provide for a subsidy to the firm. The government also has recourse to setting up an additional bidding stage if the firm is not living up to the contract.

²⁹ Lauzon and Poirier (1995:15).

³⁰It should be noted that if there are no economies of scale, then *any* size of firm is consistent with efficiency. That means that there are no advantages to large scale production or correspondingly disadvantages to large scale production. This case exists where the fixed costs are low, or the minimum efficient scale, the output at which average costs are lowest is a low level of output of the good or service.

If the fourth possibility is chosen, then it is generally recognized that to ensure that the best outcome occurs, the contract for food services must be *contestable*, which means that the firm that initially receives the contract faces an effective threat that if it does not perform according to the spirit of the contract that the contract will be terminated and a different supplier will be sought. As recognized by Demsetz (1968) potential competition may play the role of actual competition even in circumstances where a single firm production is the most efficient. However, it was recognized by Williamson (1976) that a necessary condition is that the assets used to produce the product be easily transferable. Williamson argued that in cases where assets are difficult to transfer, for example, individuals with technical expertise, the incumbent firm has a strategic advantage. If a firm that is contemplating making a bid to replace the incumbent firm knows that it may take a fair bit of time to acquire effective control over the assets, then it may be reluctant to make a bid, which gives the incumbent firm the ability to set higher prices or lower service than is desired by the government or the public officials. It has been recognized that one possible solution is for the government to own or contract with as many of the specific assets as possible, which it then leases to the private firm which then produces the service.³¹

It is important to outline the role of Aramark Canada Ltd. (formerly Versa Services Ltd.) in the *Shared Food Services Contract*.³² Versa was responsible for the design, implementation and management of food services for the centralized facility also in consultation with USSC and Newcourt. USSC agreed to provide Versa with suitable equipment at each site for the provision of Food Services, specifically, adequately equipped and operational facilities including heating, air conditioning, refrigeration and utilities service. USSC also is to provide Versa with an inventory of service wares and small equipment at each facility. Each facility is responsible for the maintenance of all rethermalization equipment at each facility, the maintenance costs to be reimbursed by USSC. Versa is to purchase all food and beverages necessary for the provision of food and catering services at each site and may receive and retain allowances from certain suppliers regarding the purchases of supplies made by Versa. Versa and USSC are to develop a joint cost and quality control advisory group, to ensure that patient/resident's needs are met. This will include the development of a patient satisfaction survey. The initial term of the contract is for 5 years with automatic renewals for further terms of 5 years, provided that neither USSC or Versa wishes to discontinue the contract at that time. Each party has the right to terminate after 90 days, by giving the other party 120 days written notice, subject to the payment of a disengagement fee by USSC to Versa which equals \$50,000 per year that the contract is prematurely terminated.

Versa was to negotiate a separate contract with each facility for non-patient food services, the financing of site specific non-patient renovations, equipment and other capital requirements from Newcourt. Versa is to guarantee a net improvement on non-patient food services, which will require a return to Versa of 1.5% of net improvement above an agreed benchmark (or \$10,000 per facility, whichever is greater) for administration and support costs associated with Versa's marketing and merchandising costs.

How does the contract meet the criteria for contestability, assuming that there are economies of scale in food delivery and preparation? First, the term of the Aramark's management contract is for 5 years which provides the firm with considerable shelter from other bidders. Second, the construction of the facility is designed to meet the production needs of the successful bidder. This is fine as long as all dimensions of the contract can be monitored and all stakeholders are satisfied with the service. *In developing a contract, a*

³¹ Williamson used the case of CATV provision in California, which featured a bidding stage where firms offered to supply cable service and a certain price to consumers.

³² The contract between Versa Services Ltd and USSC as of April 1, 1997.

crucial issue to consider is what recourse do the parties have if the contract does not live up to the expectations of both parties. For example, suppose the food quality is deemed to be less than what was anticipated in the signing of the contract. While the ability to terminate the contract provides some leverage, it may not be sufficient to ensure contractual performance. If the assets used to produce the food service were nonspecific, and the purchaser of the food services wished to solicit other bids, then the initial company could sell the assets to either the new company or the purchaser (who would then sell them to the new operator), and both the provider and the purchaser could leave the contract, relatively unscathed.³³ If the assets used to produce the food service were specific to the user, then they cannot be transferred to another food service provider without the new provider spending additional funds to adapt the specific assets to its food service operation. These conversion costs allow the original provider a degree of monopoly power, because the new operator would only be willing to take over the contract, only if he/she can provide the service to cover both the variable costs and the *initial conversion costs*. Thus the specific assets are a barrier to entry allowing the incumbent firm a degree of bargaining power not present if the assets are non specific to the user. Therefore, the nature of the contract signed here makes it unlikely that the food service provision would be contestable, which means that the disciplining device of other potential suppliers is weakened if not eliminated.

An alternative or complementary control device that is often used by the principal in a contract is to keep available the option of making the good or providing the service in house. This often acts as an effective control mechanism to ensure contractual performance. That is, it is often wise to keep sufficient capacity available to act as a check to ensure that the private firm fulfills the spirit of the contract. If the purchaser of food services decides to eliminate the in house capacity, then the capital requirements of new capacity act as a capital *barrier to entry*, making the option of providing the good or service in house less attractive. This enables the firm who is currently performing the service to have additional bargaining power, reducing its incentive to fulfil its contractual obligations.

5.3 Issues in Providing both Patient and Non-Patient Meal Services

An important issue to be addressed is the issue of providing both patient and non-patient meal services. Efficiencies that result from providing two types of services using the same production facilities are called *economies of scope*. Economies of scope exist if it is cheaper to provide both services using the same production facilities than it would be to have two facilities each providing only one service. Examples of this are local and long distance services, business class and regular passenger service. The *Shared Food Services* contract would involve economies of scope if the central facility was expected to provide meal services to both patients and non-patients. Similarly, the Status Quo, or the present hospital food service, also benefits from economies of scope, since the hospital kitchens provide food services to both patients and non-patients alike.

Non-patients currently purchase 30% of the meals produced by the present hospital food services. If the staff at Winnipeg hospitals prefer meals provided by their hospital kitchens or other food service providers, then the *Shared Food Services* contract will not provide cost savings due to economies of scope.³⁴ In

³³ Note that the initial operator would not be able to obtain a monopoly return on the assets since they are general, and must receive the competitive return.

³⁴ As of February 20, 1998, boards of six of the nine city hospitals voted to continue their own cafeteria operations rather than turn them over to *Aramark Canada Ltd.* as part of the central food processing

addition, the lower total volume of meals produced by the *Shared Food Services* contract will raise the average meal cost per day since the fixed costs are spread over a smaller number of meal days.³⁵

A useful way to think about this issue is that rather than rebuild existing cafeterias, new facilities are being constructed to provide food for hospital patients. Included in this comparison would be an analysis of what would become of the existing cafeteria space. The comparison depends on whether it is to be eliminated, which would free up space for other hospital activities if suitable, or whether a certain level of in house cafeteria capacity was required. If this space was to be used by the *Shared Food Services* facility, its opportunity cost should be included in the cost of the *Shared Food Services* system. If some cafeteria capacity was required, then the appropriate measure is the *additional* costs of providing meals to hospital patients from renovated hospital cafeterias versus the costs of providing meals to patients from the central facility. Included in this comparison would be whether staff will continue to be served by the existing hospital cafeterias. ***If the staff at the Winnipeg hospitals are not willing to purchase the food that is provided by the Shared Food Services facility, then the proposed cost savings from non-patient meals which result from the Shared Food Services system should not be attributed to the new system.*** Moreover, depending on the participation rate of non-patient in the food service program, the costs of patient meal services would be affected, since a lower volume of meals would be produced, raising the average meal day cost.

6. The Contract for Shared Food Services: Determining the Net Benefits

6.1 Overall Assessment of the Choice of Provision

In evaluating the net benefits from the proposed change in food services, the change in net benefits to society is defined as the sum of the changes in net benefits received by the groups or individuals affected by the change.³⁶ Among the major groups or individuals effected are consumers, producers, the government, labour, and other businesses. One measure of the net benefits to society is

$$\text{Net benefits} = \text{the change in (consumer benefits + government receipts + profits to firms + benefits to labour)}$$

Leroy et al. argue that the above equation misses an important issue in cost-benefit analysis, which is the distribution of the surplus. The net benefit measure described above involves the sum of the dollar surpluses earned by all groups in society.³⁷ It is generally felt that if the profits are earned by foreign

unit, *Winnipeg Free Press*, February 20, 1998, p. A8.

³⁵ This point is a major reason why the agreement requires that hospitals purchase all their patient meals from USSC.

³⁶ A useful reference for the issues addressed here is Leroy Jones, et al. (1990), which discusses cost benefit methodology applied to the selling of public enterprises.

³⁷ The issue of monetary measures of welfare has a long history in economics. The conventional approach in welfare economics is to consider two measures of welfare *change*, one measure is called the compensating variation which states that in the event of a price increase, how much would we have to compensate the individual in terms of income to allow him or her to be indifferent to the original position and

firms then the weight should be zero; however, if the profits are earned by firms from another province, then those profits might be included as a net benefit but given a lower weight than if the profits were earned by a local firm.

These categories of the change in net benefits are discussed in turn.

(i) Measuring the Change in Consumer Benefits

One measure of the change in consumer benefits is the change in consumer surplus. Consumer surplus is defined as the total valuation of the quantity of goods that are chosen minus the total expenditure that consumers must pay. The change in consumer benefits is equal to the *change* in the benefits received by consumers from the policy change.

If hospital patients had to pay for their own meals, their willingness to pay for hospital meals could be illustrated by a demand curve for hospital food of the usual shape. The downward sloping demand curve can be thought of as an ordering of willingness to pay by patients from the highest to the lowest. At higher prices, fewer meals would be chosen. The willingness to pay for hospital meals is undoubtedly a function of the *quality* of the meals. A higher quality of food would increase the willingness of patients to pay for meals, a lower quality would reduce their willingness to pay.

A difficulty in analysing the net benefits from the hospital meals is that hospital patients do not choose their food service provider, the hospital decides, on the menu and allows the patient to choose from among the set of meals (subject to dietary restrictions). Thus, what we have to estimate is the value that patients would place on the meals, which may differ from what it costs the hospitals to provide the meals. For example, if a patient had to pay for his or her own meal, which costs the hospital say \$5.00 to provide, only those patients valuing the meal at \$5.00 or more would purchase the hospital food, if there was a choice of food services. However, if there is no choice then the patient would consume the food which costs \$5.00 which is valued at say \$4.50, thus we have a social loss of \$.50 on that meal, assuming competitive supply of the hospital meals.³⁸

Suppose we feel that we have a reasonable estimate of the willingness to pay for hospital meals, then to measure the net social benefits, we subtract from the total willingness to pay for a given quantity and quality of meals, the total social costs of providing those meals, to measure the net social benefits. In

the higher price and higher income level. An alternative measure is the equivalent variation. Both these measures depend on the individuals own preferences regarding his or her well being in the respective states. It has been shown that a third measure, consumer surplus, falls in between these two measures, if the good under consideration is a normal good.

³⁸ There are several methods to estimate the value that is to be placed on food services provided. One is a survey approach, which is to ask all patients what they would be willing to pay for a meal of a given quality. Assuming truthful revelation of willingness to pay, we could order the responses from highest to lowest to determine the hospital willingness to pay curve. Alternatively, we could find a comparable meal provided by another food service provider which is purchased by a similar cross section of people and estimate the willingness to pay from that approach. Private hospitals which charge for meals and allow consumer choice of providers would be a useful model to use. Third, you could ask unbiased experts in the food industry, what they envision the demand curve facing a firm would be that was supplying the given quality of meal.

aggregating the net social benefits we may want to weight the social benefits differently depending on who receives them. For example, it may be considered more important that low income individuals receive the consumer benefits than do higher income individuals, therefore we might set a higher weight on those benefits in aggregating the net social benefits. Or we might weight the consumer benefits received by children higher than older individuals. One can imagine a number of ways in which distributional issues would enter the calculation. It is important to realize that lower quality of meals would result in a reduction in the aggregate willingness to pay and hence a reduction in the net social benefits of any given quality of meals.

There is considerable controversy regarding the quality of meals under the status quo versus the *Shared Services Contract*. In the initial period of operation, residents of Deer Lodge Hospital lodged numerous complaints over the food service from the new system. USSC confirmed they had been flooded with complaints over poor quality.³⁹ USSC claims that the status quo system was “marginal at best” and that as far as the new system is concerned, “based on taste-panel results for the period Oct. 10-29, cleanliness has improved to 85 per cent, taste has improved to 70 per cent and the final score has improved to 81 per cent, or an A.”⁴⁰

It has been reported that in some cases, food service systems that had been centralized were subsequently changed back to the old system. For example, the British Columbia psychiatric facility in Port Coquitlam reverted back to the system of in-house preparation at the request of the ombudsman after numerous complaints. In other cases, for example, the Atlantic Health Sciences Corp. (AHSC) who had switched over to serving reheated food at its 12 hospitals and health centres in 1995, maintains that its system, after a barrage of complaints, has improved and AHSC has no intentions of reverting to in-house preparation.⁴¹

Other evidence comes from the Canadian Union of Public Employees, CUPE Research Branch (1996, 1998). Their most recent research seems to indicate that the shared food services system in New Brunswick and Ontario are incurring significant operational and financial difficulties. For example, the poor quality of food has made headlines in New Brunswick papers, with the research branch concluding that “the shared system is no doubt proving extremely costly”.⁴² In Ontario, they argue that “since switching from conventional to cook-chill and shared food production, Toronto hospital has had its first ever deficit in their dietary budget (\$2 million).”⁴³ These examples suggest that the shared services system might be more difficult to operate than its proponents suggest.

(ii) Measuring the Change in Government Receipts

³⁹ Allison Bray, *Winnipeg Free Press*, October 18, 1998.

⁴⁰ Letter to the Editor from Joe Shiel, Chief Executive Officer, Urban Shared Services Corporation, *Winnipeg Free Press*, Monday, November 23, 1998. The taste panels consist of hospital staff, patients, and their families at each of the five hospitals that were served at the time.

⁴¹ Allison Bray, *Winnipeg Free Press*, November 1, 1998, p. A1.

⁴² CUPE Research Branch (1998:3).

⁴³ CUPE Research Branch (1998:8).

Government receipts can be of two types. In the case of a public enterprise it takes the form of dollar losses or gains. If the activity generates taxes, then government receipts take the form of taxes. The measure to include here is the *change* in government receipts. In cost-benefit analysis, the group termed government can alternatively be thought of as the general public. In the Shared Services contract, USSC estimates the benefits to Manitoba Health as \$7.6 million, which is the difference between their estimates of the total annual costs of the Status Quo versus their Shared Services contract (Appendix 9).

In the estimates given of potential savings, \$5.9 million given in Appendix 7, the crucial issue is how to evaluate the deficit on current non-patient meal services of \$2.3 million dollars. If this loss is due to underpricing of non-patient meals, then an elimination of this loss involves a *transfer* of benefits from those purchasing non-patient meals, not a net gain. That is, Manitoba Health's gain of \$2.3 million is offset by a loss of benefits from non-patient meals of \$2.3 million. Only if the \$2.3 million is the result of lower average costs on non-patient meals, with the quality held constant, should the \$2.3 million be included as a net benefit of the new system.⁴⁴

In addition, USSC estimates an improvement of 3.3 million on patient food services.⁴⁵ However, if the debt servicing costs of the new facility are subtracted, then the net improvement is reduced to approximately \$550,000. It appears that USSC's estimate of net improvement assumes that there is no depreciation of the centralized facility over the 20 year period.

(iii) Measuring the change in Profits to Firms

The change in profits can be felt in a number of areas. If the policy change affects the profits of one firm, it equals the increase or decrease in profits earned by the firm accompanying the policy change. If more than one firm is effected then the change in the total change in profits is equal to the sum of the total profit changes that effect all firms.

For the Shared Food Services contract the key issue is what happens to the change in respective profits of Manitoba firms under the contract versus the status quo. If profits that are currently earned by Manitoba firms are transferred to firms outside the Province, then these lost profits must be entered as net losses from the *Shared Food Services* contract. If the profits of existing firms supplying food to Manitoba hospitals are reduced but other Manitoba firms are increased by the same amount, then there is no net loss or gain that results from the *Shared Food Services* contract. This is the issue raised by the consulting firm *Food Management Consultants Ltd.* in their report. USSC has maintained that "53% of the items served

⁴⁴If the costs of patient and non-patient food services could be separated as estimated, then \$2.3 million could be saved merely by eliminating non-patient food services. However, hospital staff and visitors might prefer having meals within the hospital, and might be willing to pay a premium for availability within the hospital. Alternatively, if demand for non-patient meals was unresponsive to price (perfectly price inelastic), then the \$2.3 million could be reduced by raising prices. For example, to eliminate the deficit for the St. Boniface Cafeteria, the revenue per meal day would have to be increased by 27%, from \$13.00 to \$16.63. The more likely scenario is that as the price is raised for non-patients, the demand for non-patient meals would fall, the rate affected by the number of alternatives available (as well as their prices) for cafeteria food service.

⁴⁵ The \$5.9 million in improvement has been estimated by USSC to come from converting a 2.3 million deficit to a \$270,000 (approximately 2.6 million improvement on non-patient food services) with the remaining \$3.3 million to come from patient food services (Appendix 7)..

are 'Made in Manitoba'. 100% of all USSC food, in fresh packaged and frozen form ... is purchased right here in Winnipeg from locally owned food distribution companies and wholesalers."⁴⁶ The key issue that has generated controversy is how these figures compare with the previous system.⁴⁷ This information was requested from the Chairman of Urban Shared Services Corporation, on December 2, 1998. As of yet, no figures have been released. This information is key to determining whether Manitoba firms have been affected by the introduction of the *Shared Food Services*.

(iv) Measuring the Net Benefits to Labour

The use of labour is an important issue in the provision of hospital food services. To the extent that the labour which is now employed is reduced, the loss of net benefits workers brought about by the reorganization must be taken into account.⁴⁸ There are two principal cases to consider. If the workers who lose their jobs remain unemployed, then the difference between the wages they were earning and the wage it would take for them to take any type of job is subtracted from the net benefits. If some of the workers find alternative employment at a lower wage, then the difference between their former wage and their new wage is subtracted, that is we subtract the wage premium they were earning at their former job. This return above a worker's opportunity cost is called the *labour externality* that accompanies a project, which is a standard element of cost benefit analysis. It is true that the reduction in the use of labour will be offset somewhat by an increase in the use of labour in the production of imported food services, the increased labour will be a benefit earned by the other jurisdiction. These are defined as the change in benefits to labour.

7.0 Recent Developments

The preceding analysis was based principally on the business plan of USSC regarding the *Shared Food Services* contract. It is useful to highlight a number of recent events. On April 21, 1999, it was announced the provincial auditor will review of the operations of USSC, after receiving information that suggests the facility may be having technical and financial problems.⁴⁹ On April 28, 1999, USSC announced that for 1998-99 fiscal year, hospital food service costs were \$2.5 million higher than projected.⁵⁰ Of the total, \$1.3 million was for higher fixed costs, and \$1.2 for higher variable costs, primarily food costs. These additional costs were incurred despite the fact that Winnipeg's two largest hospitals, Health Sciences Center and St.

⁴⁶ USSC, *Frequently Asked Questions*, p.5.

⁴⁷ A central issue is who earns the profits from the sale of the food inputs to USSC, not solely whether a purchase is made from a local company. If local firms act merely as distributors to USSC, earning very little of the value added, then the profits still go to firms outside Manitoba.

⁴⁸ Information was requested from the Chairman of USSC on job related numbers related to the new system on December 2, 1998. The information requested included how many individuals took early retirement, how many were laid off, etc. However, the requested information has not been released to the author. In lieu of that information,

⁴⁹ Winnipeg Free Press, April 21, 1999.

⁵⁰ *Urban Shared Services Corporation*, News Release, April 28, 1999.

Boniface General Hospital were not using the new system. On June 1, 1999, the CEO of USSC, Joe Shiel announced that he was resigning from the position for personal reasons.

It is unclear at this time, whether these increases in operating costs for the *Shared Food Services* contract are permanent or temporary. If the higher costs are permanent then the decision regarding the future food services for Winnipeg Hospitals once again becomes an issue. One option is to use the centralized facility to serve the smaller Winnipeg hospitals, while Health Sciences Center and St. Boniface General Hospital retain their hospital kitchens. This is particularly important if, as has been suggested, the facility is already close to capacity.⁵¹ The problem with this approach is that different hospitals will have different types of food services, the food provided using the centralized facility, and the conventional hospital food. It may be problematic to have two different food systems available if they differ markedly in quality. A second option would be to discontinue the centralized food service system, pay out the remaining amount of the loan, with proceeds from the sale of the all assets that are vested with USSC. This option would require a thorough appraisal of all assets including the facility itself. The value of the building would depend on its suitability for other uses. A third option would be for the Health Sciences Centre and the St. Boniface General Hospital to provide meals to the smaller hospitals using the conventional or modified food service approach which would make use of existing facilities.

7.0 Conclusion

This paper has attempted to analyse a particular contract proposal for the provision of hospital food services in the Province of Manitoba. A number of conclusions can be made.

- The net benefits from the *Shared Food Services* contract depend critically on the quality of meals provided by the new system, which affects the demand by non-patients for food services.
- If non-patients do not choose the meals provided by the *Shared Food Services* contract then the benefits from economies of scale and economies of scope are reduced.
- If the current loss on non-patient meals is due to underpricing of the meals, then the *Shared Food Services* contract which proposes a slight surplus on non-patient meals, involves a transfer of benefits from non-patients to the public sector, not an efficiency gain. If the current loss on non-patient meals is due to higher costs of the Status Quo system, rather than underpricing of meals, and the non-patients consider the Shared Services meals to be equivalent to the present system, then the *Shared Food Services* contract represents an efficiency gain.
- To the extent that hospitals cafeteria workers are earning labour premiums, then the difference between their current wage and their future alternative wage must be subtracted from the net benefits from the reorganization.
- To the extent that hospital food inputs are purchased from non-Manitoba suppliers, the reduction in

⁵¹ It has been suggested by union officials that USSC is running at full capacity. Officials of the United Food and Commercial Workers suggest that currently 137 employees are producing 6,000 meals per day, whereas USSC budgeted for 117 employees (84 EFT) to provide 8700 meals per day. They argue that USSC is 70% over budget on labour costs and 63% over on their food costs. Personal communication, May 4, 1999.

profits from these Manitoba firms must be subtracted from the net benefits from the reorganization.

- If the quality of meals provided by the *Shared Food Services* contract is below the current quality of meals, then the lower value patients and non-patients placed on meals must be subtracted from the net benefits from the *Shared Food Services* contract.
- It is important to determine the rights of patients regarding the quality of meals provided to them. It seems clear that in areas where patients are paying explicitly for meals, such as nursing homes, that the residents should be treated as paying customers with all the usual rights that accompany the consumer. In the case of hospitals, an ombudsman should be charged with the task of ensuring that patients receive meals of acceptable quality. It seems unreasonable for that quality to be determined solely by the supplier of the food service. While direct patient complaints might help to monitor food quality, it may be the case that some people may be reluctant to complain because they feel it might not be effective.

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Statistical Appendix

Appendix 1: Background Information on Winnipeg Hospital Food Services							
Hospital/ Organization	Beds ¹	Trays per day ²	Multi-portion Meals per day ³	Non-patient Meals per day ⁴	Total Meals per day	EFT ⁵	Food Service Dept. ⁶ (sq. ft)
Seven Oaks	280	727	0	210	937	37.3	6148
Health Sciences	845	2061	105	1400	3566	149.0	23,697
Grace General	276	867	50	332	1249	47.5	7,711
Deer Lodge	461	1225	105	398	1728	58.4	10,560
Concordia	196	625	152	194	971	26.4	5,449
Victoria General	253	687	22	212	921	37.5	6,750
Riverview	388	842	0	126	968	54.9	7,580
St. Boniface	554	1509	32	951	2492	n/a	20,357
Misericordia	224	636	10	262	908	45.7	6,508
Total	3477	9179	476	4085	13,740	na	94,760

Notes:

1. *Future Number of Beds, KPMG (1996:7)*
2. *Patient Meals which are trayed, KPMG (1996:8)*
3. *Patent Meals in bulk format for dining room service KPMG (1996:8)*
4. *Cafeteria, catering, etc. KPMG (1996:8).*
5. *Staffing budgeted 96/97, Equivalent Full Time positions (EFTs) for food and nutrition services at each hospital, including clinical nutrition, patient and non-patient services, KPMG (1996:10)*
6. *Total space currently allocated for each Department of Food and Nutrition Services, does not include cafeteria and other non-patient specific space, KPMG (1996:14)*

Appendix 2: Operating Cost Data for Winnipeg Hospitals Food Services (Budget 1996/1997)										
Budget 95/96	Seven Oaks	Health Sciences	Grace	Deer Lodge	Concordia	Victoria	Riverview	Saint Boniface	Misericordia	Total
Annual Operating Costs										
- Labour	1122,495	4,807,991	1443,909	1,493,076	750,054	1,009,087	1,425,096	3,442,652	1,282,151	16,776,511
- Benefits	144,802	846,206	205,035	214,745	101,134	121,090	83,370*	538,431	160,643	2,415,456
- Food	683,120	2,396,096	645,300	943,200	463,335	519,305	637,800	1,604,968	631,240	8,524,364
- Other	110,900	374,877	150,006	92,800	65,049	69,110	93,500	339,825	141,338	1,437,405
Total	2061,281	8,425,170	2444,250	2,743,821	1,379,572	1,718,593	2,239,766	5,925,876	2,215,372	29,153,701
Non Patient Recoveries										
-Cafeteria	365,200	2,420,260	418,000	285,000	266,500	356,600	175,500	978,986	333,600	
-Cash Catering		132,500	2,000	7,000		2,200		50,896		
-Non-Cash Catering	33,000	36,514	53,000			46,500	23,400	49,936		
- Coffee Shop	20,400	26,465						41,000		
- Vending		35,948		8,000		13,900		21,094		
- Dining Room		1,092								
- Other								163,717		
Sub Total	418,600	2,652,779	473,000	300,000	266,500	419,200	198,900	1,305,089	333,600	6,367,668
Patient Related Recoveries										
-Day Care	15,600				13,828		38,100	58,843	52,825	
- Meals on Wheels		306,616	38,500	15,000	110,500	38,200	13,800	135,921		
- Other										
Sub Total	15,600	306,616	38,500	15,000	124,328	38,200	51,900	194,764	52,825	837,733
Total Recoveries	434,200	2,959,395	511,500	315,000	390,828	457,400	250,800	1,499,853	386,425	7,205,401

Source: Data Package, USSC Shared Food Services Request for Proposal, August 15, 1996

Appendix 3: Data on Meal Days at Winnipeg Hospitals (96/97)

Patient Resident	Seven Oaks	Health Sciences	Grace	Deer Lodge	Concordia	Victoria	Riverview	Saint Boniface	Misericordia	Total
In patient Resident	94,900	251,865	80,635	71,467	47,000	62,000	110,600	124,127	81,780	
Outpatient:		6,958	13,128	90,498	21,681			41,601		
-Day Programs	5,000	1,464				4,600	1,900	12,801		
- Day Care	1,200	1,027		2,183			1,200			
- Meals on Wheels		19,124	2,870	1,153	8,500	2,770		4,552	3,849	
- Other		10,010			5,300			3,424	5,000	
Sub total	101,100	289,885	99,989	165,301	82,481	69,370	113,700	186,505	90,629	1,198,960

Non Patient										
-Cafeteria	28,092	195,590	32,757	21,923	20,500	27,240		76,489	26,385	
- Cash Catering		11,982		538		4,600		2,932		
- Non cash Catering	2,538	3,836		3,800	3,080	4,300	1,800	2,943	5,500	
- Courtesy		2,070		1,157		320		2,169		
- Vending		3,228		615				1,658		
- Coffee Shop		26,907						3,014		
- Dining Room		224								
- Other		128			4,061			12,733		
Sub total	30,630	243,965	32,757	28,003	27,641	36,460	1,800	101,938	31,885	535,079

Total Patient and Non Patient	131,730	533,850	132,746	193,334	110,122	105,830	115,500	288,443	122,514	1,734,069
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Source: Data Package, USSC Shared Food Services Request for Proposal, August 15, 1996

Appendix 4: Proposed Annual Costs of Shared Services Contract	
<i>Proposed Direct Annual Costs</i>	
RDU	
- Labour	(2,827,625)
- Food	(6,157,483)
- Other	(1,234,015)
Total RDU Direct Annual Costs	(10,219,123)
Hospital	
- Labour	(3,356,752)
- Food	(385,498)
- Other	(INC ABOVE)
- Patient Related Recoveries	1,174,144
- Add'l Clinical Cost Ctr Cost	(2,300,430)
Total Hosp Direct Ann Costs	(4,868,536)
Total Direct Annual Costs (1)	(15,087,659)
<i>Proposed Indirect Annual Costs</i>	
- Computer - RDU	(13,845)
- Computer - Hospitals	(46,430)
- RDU Prep (Versa)	(10,000)
- RDU Training (Versa)	(40,000)
- Transportation	(886,928)
- Op'g @\$ 16/s.f. x 34m s.f.	(544,000)
- Asset Mgmt/Equip reserve	(160,000)
- Equipment Replacement	(175,100)
Total Indirect Annual Costs (2)	(1,876,303)
Total Proposed Annual Costs (1+2)	(16,963,962)

Source: USSC, Shared Food Services, Commitment Document Package, June 23, 1997.

Appendix 5: Construction and Other Development Costs for Shared Services Contract

Regional Distribution Facility (RDU)		
- Land	(522,500)	
- Building	(4,108,149)	
- Fd Svc Equip	(2,694,500)	
- Furnishings	(80,000)	
- Misc Equip	(40,000)	
- Gen'l Conditions	(468,094)	
- Contingency	(739,074)	
Total Hard Costs	(8,652,317)	
- Design Fees	(760,631)	
- Other Soft	(865,050)	
- Permits	(91,916)	
Total Soft Costs	(1,717,597)	
Total Costs (RDU)	(10,369,914)	
Facility		
Patient		
- Renovation	(1,042,202)	
- Fd Svc Equipment	(377,560)	
- Misc Equip	(20,000)	
- Gen'l Conditions	(97,695)	
- Contingency	(153,746)	
Total Patient	(1,691,203)	
Non-Patient		
- Renovation	(424,915)	
- Fd Svc Equip	(90,065)	
- Cash registers/ Misc Equip	(19,567)	
- Gen'l Conditions	(INC ABOVE)	
- Contingency	(53,460)	
Total Non-Patient	(588,057)	
Soft		
- Design Fees	(158,749)	
- Other Soft	(227,878)	
- Permits	(19,184)	
Total Soft Costs	(405,811)	
Total Facility	(2,685,071)	
Total Construction Costs (Facility plus RDU)		(13,054,985)
Other Development Costs		
- Meal Delivery System	(4,616,842)	
- Computer System	(1,009,511)	
- Financing Costs	(2,782,652)	
Total Other Development Costs		(8,409,005)
Total Construction & Other Development Costs		(21,463,990)
Estimated Debt Service		(2,744,242)

Source: USSC, Shared Food Services, Commitment Document Package, June 23, 1997.

Appendix 6: Non-Patient Food Services at Winnipeg Hospitals										
Current System	Seven Oaks	Health Sciences	Grace	Deer Lodge	Concordia	Victoria	Riverview	Saint Boniface	Misericordia	Total
Labour	298,993	1,840,078	305,556	295,109	301,000	333,565	202,858	1,058,671	341,739	4,977,569
Benefits	38,570	218,969	43,389	42,791	48,912	40,028	36,514	165,576	44,803	679,552
Food	152,941	1,023,363	161,106	138,055	118,446	177,582	128,956	525,582	161,890	2,587,921
Other	25,787	251,000	32,053	14,831	16,171	19,829	18,340	120,097	27,086	525,194
Subtotal	516,291	3,333,410	542,104	490,766	484,529	571,004	386,668	1,869,926	575,518	8,770,236
Revenue	418,600	2,652,779	491,224	300,000	266,500	419,200	216,200	1,302,268	333,600	6,400,371
Surplus/ (Deficit)	(97,691)	(680,631)	(50,880)	(190,786)	(218,029)	(151,804)	(170,468)	(567,658)	(241,918)	(2,369,865)
Proposed System										
Labour	224,153	1,068,500	245,154	220,456	141,083	191,118	168,154	573,031	198,436	3,030,085
Benefits	28,916	127,151	34,812	31,966	22,926	22,934	30,266	89,622	28,015	414,610
Food	180,947	1,174,464	201,969	199,825	99,337	187,021	81,238	544,405	183,965	2,853,171
Other	33,134	204,907	38,361	36,250	20,842	34,310	17,864	93,594	33,978	511,240
Subtotal	467,150	2,575,022	518,296	488,497	284,188	435,383	297,524	1,300,652	442,394	6,809,106
Revenue	457,751	2,878,637	488,612	490,068	248,743	476,408	201,455	1,390,520	445,995	7,078,189
Surplus/ (Deficit)	(9,399)	303,615	(29,684)	1,571	(35,445)	41,025	(96,069)	89,868	3,601	269,083
Net Improvement (Deficit)	88,292	984,248	21,198	192,357	182,584	192,829	74,399	657,528	245,519	2,638,948

Source: USSC, Shared Food Services, Commitment Document Package, June 23, 1997.

Appendix 7: Shared Food Services Business Case Summary	
Patient Food Service	
Total current costs (annual)	20,271,391
Proposed annual costs	16,963,962
Difference	3,307,429
Total current costs (annual)	20,271,391
Proposed annual costs	16,963,962
Debt service	2,744,242
Proposed annual costs plus debt service	19,708,204
Net Improvement	563,187
Net Improvement plus debt service	3,307,429
Non-Patient Food Service	
Current Surplus (Deficit)	(2,369,865)
Proposed Surplus (Deficit)	269,083
Net Improvement	2,638,948
Total Improvement	5,946,377

Source: Shared Food Services Commitment Document Package

Appendix 8: Job and Employment Facts estimated by USSC			
	Positions (EFT) ¹		
	Today	Future	Reduction
Patient Food Services	416	234 ²	182
Non-patient Food Services	194	124	70
Total	610	358	252

Source: *Shared Food Services*, Urban Shared Services Corporation

Notes: (1) EFT - Equivalent to Full Time
(2) Hospitals 150, Regional Distribution Facility 84

Appendix 9. Estimates by USSC of Total Economic Benefit to Manitoba Health*

(\$ in Millions)	Status Quo	USSC
	Capital outlay to rebuild hospital kitchens at individual hospitals	Capital outlay to build Shared Food Services
- Construction	\$30.5	\$20.0
- Transition Expenses	\$5.6	\$3.7
- Total Capital Outlay	\$36.1	\$23.7
- Annual Capital Financing Costs	\$4.5	\$2.8
- Combined Annual Food Services Operating Costs	\$22.6	\$16.8
- Total Annual Costs	\$27.1	\$19.5

Total Annual Economic Benefit to Manitoba Health = 27.1 - 19.5 = 7.6 million

* Source: *Shared Food Services*, Urban Shared Services Corporation

Appendix 10: Analysis of Cafeteria Revenue and Expenses for St. Boniface General Hospital

Actual							
	91/92	92/93	93/94	94/95	95/96	96/97	
CAFETERIA							
Salaries	872,320	868,809	845,368	818,537	765,025	723,852	
Food	598,561	467,067	488,856	489,948	528,503	544,272	
Other Supplies	43,379	50,710	45,692	28,148	37,911	37,130	
SABINOS							
Salaries	24,805	111,428	118,429	110,163	99,709	107,559	
Food	14,256	44,671	45,491	42,165	49,381	47,250	
Other Supplies	8,077	11,394	1,830	1,232	3,150	9,007	
Total Cost	1,561,398	1,554,079	1,505,666	1,490,193	1,483,679	1,469,470	
REVENUE							
Cafeteria	1,427,760	1,329,470	1,180,335	1,084,394	1,083,842	1,047,628	
Sabinos	46,026	203,160	155,752	154,872	181,933	172,850	
Total Revenue	1,473,786	1,532,630	1,336,087	1,239,266	1,265,775	1,220,478	
Net Expenses	(87,612)	(21,449)	(169,579)	(250,927)	(217,904)	(248,592)	
FTEs	28.65	27.61	25.59	24.52	23.03	24.3	
- Cafeteria Meal Days	135,375	127,059	95,629	81,500	79,818	80,586	
- Sabinos Meal Days	4,337	21,236	13,960	12,395	14,703	13,296	
Total Meal Days	139,712	148,295	109,589	93,895	94,521	93,882	
- Cost/Meal Day	11.18	10.48	13.74	15.87	15.70	16.63	
- Salary Cost/Meal Day	6.42	6.61	8.79	9.89	9.15	9.02	
- Food Cost/Meal Day	4.39	3.45	4.51	5.67	6.11	6.94	
- Revenue /Meal Day	10.55	10.34	12.19	13.20	13.39	13.00	
- Meal Day/EFT	4,876.51	5,371.06	4,282.49	3,829.32	4,104.26	3,863.00	

Source: United Food and Commercial Workers, January 23, 1997.

