

The Economic Impact of Physician Recruitment

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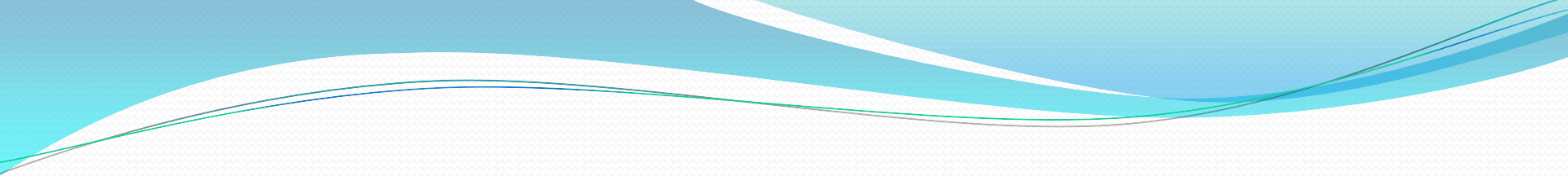
The Context

- Federal and provincial deficit
- Escalating healthcare costs
- Tight municipal and hospital budgets
- Changing definitions (if the recommendations of the Northern and Rural Healthcare Framework are accepted many small hospitals in Southern Ontario will no longer be classified as rural)
- The proposed hospital funding formula

Determinants of Health

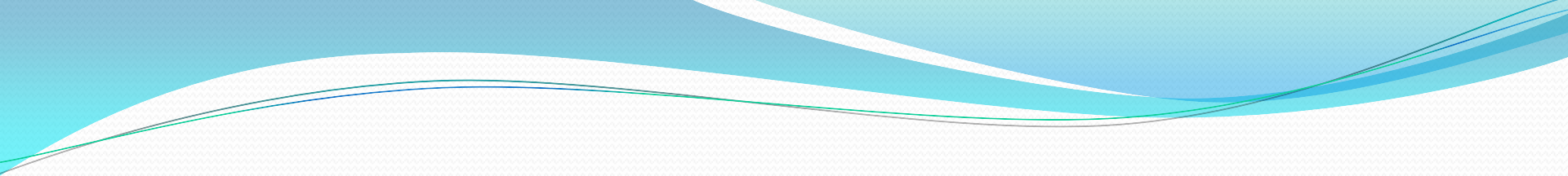
- Healthcare system accounts for 25% of health outcomes (but roughly 40% of the provincial budget)
- Biology/genetics accounts for 15% of health outcomes
- Physical environment accounts for 10% of health outcomes
- Socio-economic variables account for 50% of health outcomes

Final Report of the Senate Subcommittee on Population Health, 2009



Limited infrastructure can be a serious hindrance to rural development. The absence of key infrastructure (such as health services) can make some rural places less attractive for development and investment.

Ryser and Halseth, 2010



High quality service infrastructure is an essential component of a society's growth and development. If facilities and services deteriorate and/or become inadequate, economic growth is deterred and quality of life of those in that society is adversely affected. A viable health sector is a major component of a community's infrastructure, and attracting new firms to provide jobs and economic growth can be extremely difficult without quality medical services.

Doeksen and Schott, 2003

Healthcare Infrastructure Contribution to Economic Development

- Promotes a healthy labour force
- Attractive to business and industry
- Direct economic impacts
- Induced economic impacts
- Indirect economic impacts

Healthcare Infrastructure Contribution to Economic Development

- A study by Lyne (1990) found in a survey of corporate CEOs that adequate healthcare facilities ranked 6/12 in terms of quality of life factors considered important for establishing industries in communities.
- In the context of healthcare a hospital and adequate supply of physicians were the two most important healthcare variables reported by these CEOs.

Physician Practice Economic Contribution

- 1 physician who employs 3.5 people will generate an additional 4 jobs in the community for a total of 8.5 jobs (including the physician)

Source: Kleinholtz and Doeksen, 1991

Healthcare Contributions to the Local Economy

- 9 counties in Oklahoma
- healthcare responsible for 9% of local employment
- When secondary employment was considered it found that the healthcare sector was responsible for 14% of all local employment
- Employment multipliers ranged from 1.30 to 1.81
- Income multipliers ranged from 1.45 to 1.87

Doeksen et al., 1998

Healthcare Contributions to Local Economies: Employment Multiplier (Doeksen and Schott, 2003)

Service	Employment Multiplier	Income Multiplier
Hospital	1.70	1.47
Physician/Dentist	1.79	1.34
Pharmacy	1.49	1.61

A Mayor's Perspective

(hospitals)...play an important part in sustaining the economic vitality of their towns by injecting dollars into the local economy and by providing one of the basic community services that is needed to attract and retain other employers.

Pirani and Rosenblatt, 1991

A Mayor's Perspective

- 71.1% out of 130 mayors surveyed regarded physician shortage as an important reason for hospital closure in their community.
- The most perceived negative effects of hospital closure was the economic effects (63.4% of 130).
- 72.4% thought community health status was worse as a consequence of hospital closure with 37.4% reporting it as being much worse.

Pirani and Rosenblatt, 1991

A Mayor's Conclusion

There is a clear interrelationship between general economic development and health services, with each supporting and amplifying the other, both during growth and during atrophy.

Pirani and Rosenblatt, 1991

Estimated Local Hospital Income Generation (multiplier 1.47)

Hospital	Payroll	Estimated Total Income	Estimated Income Generated	Estimated Income per Bed
Alexandra Hospital	\$9,580,711	\$14,083,645	\$4,502,934	\$128,655
Tillsonburg District Memorial Hospital	\$14,616,782	\$21,486,669	\$6,869,988	\$134,703

Estimated Local Employment Generation (multiplier 1.70)

Hospital	FTE	Estimated Total Jobs	Estimated Jobs Generated	Estimated Jobs per Bed
Alexandra Hospital	138	235	97	2.77
Tillsonburg District Memorial Hospital	213	362	149	2.92

Payments Made to Recruited Physicians in Windsor/Essex: 2004-2010

Year	Number of Physicians Recruited	Total Payments (estimated) made to New Recruited Physicians for Year	Accumulated Payments Made to all Recruited Physicians
2004-2005	28	\$7,104,100	\$7,104,100
2005-2006	30	\$7,479,600	\$14,583,700
2006-2007	35	\$10,034,700	\$24,618,400
2007-2008	36	\$9,825,500	\$34,443,900
2008-2009	31	\$9,992,800	\$44,436,700
2009-2010	39	\$11,763,800	\$56,200,500
Total	199	\$56,200,500	\$56,200,500

Estimated Return on Investment for Physician Recruitment For Windsor/Essex: 2004-2010

Year	# of Physicians Recruited	Total Payments made to Recruited Physician	Physician Recruitment Budget	Estimated Return on Investment by Physician Payment 2004-2010
2004/2010	28	\$42,624,600	\$212,393	\$200.69
2005/2010	30	\$37,398,000	\$208,612	\$179.27
2006/2010	35	\$40,138,800	\$218,451	\$183.74
2007/2010	36	\$29,476,500	\$220,065	\$133.94
2008/2010	31	\$19,985,600	\$205,689	\$ 97.16
2009/2010	39	\$11,763,800	\$204,345	\$57.57
Total	199	\$181,386,700	\$1,269,557	\$142.87

Estimated Jobs Generated as a Result of Physician Recruitment (Employment Multiplier 1.79) for Windsor/Essex: 2004-2010

Year	Number of Physicians Recruited	Estimated Support Staff (3 per physician)	Estimated Jobs Additional Jobs Generated (Multiplier 1.79)	Estimated Total Jobs Generated (Excluding Physicians)
2004-2005	28	84	22.12	106.12
2005-2006	30	90	23.7	113.7
2006-2007	35	105	27.65	132.65
2007-2008	36	108	28.44	136.44
2008-2009	31	93	24.49	117.49
2009-2010	39	117	30.81	147.81
Total	199	597	157.21	754.21

Estimated Income Generated Beyond Physician Payment: 2004-2010 (multiplier 1.34)

Year	Number of Physicians Recruited	Total Recruited Physician Accumulated Payment	Total Income Generated	Income Generated Beyond Physician Payments
2004-2010	28	\$42,624,000	\$57,116,160	\$14,492,160
2005-2010	30	\$37,398,000	\$50,113,320	\$12,715,320
2006-2010	35	\$40,138,800	\$53,785,992	\$13,647,192
2007-2010	36	\$29,476,500	\$39,498,510	\$10,022,010
2008-2010	31	\$19,985,600	\$26,780,704	\$6,795,104
2009-2010	39	\$11,763,800	\$15,763,492	\$3,999,692
Total	199	\$181,386,700	\$243,058,178	\$61,671,478

Rental Income Generated for Windsor/Essex: 2004-2010 (\$13.50 per square foot)

Year	# of Physicians Recruited	Office Space Required	Rental Income
2004/2010	28	28,000	\$2,268,000
2005/2010	30	30,000	\$2,025,000
2006/2010	35	35,000	\$1,890,000
2007/2010	36	36,000	\$1,458,000
2008/2010	31	31,000	\$ 837,000
2009/2010	39	39,000	\$ 526,500
Total	199	199,000	\$9,004,500

Total Return on Investment for Physician Recruitment for Windsor/Essex: 2004-2010

Source of Revenue	Estimated Revenue Generated	Physician Recruitment Budget	Estimated Return on Investment
Estimated Physician Payment	\$181,386,700		
Estimated Income Generated	\$ 61,671,478		
Estimated Rental Income	\$ 9,004,500		
Total	\$252,062,678	\$1,269,557	\$198.54

Conclusion

Regions should view physician recruitment as a strategic economic investment and not as a handout. The economic and general well-being of regions and their residents are directly related to the well-being of the healthcare sector, and the well-being of the healthcare sector is dependent upon physicians. The healthcare sector not only provides access to healthcare, but is part of the infrastructure that promotes the overall well-being of the region and its citizens.