



Change in occupation mix: Health care & social assistance 2006 - 2016

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Highlights

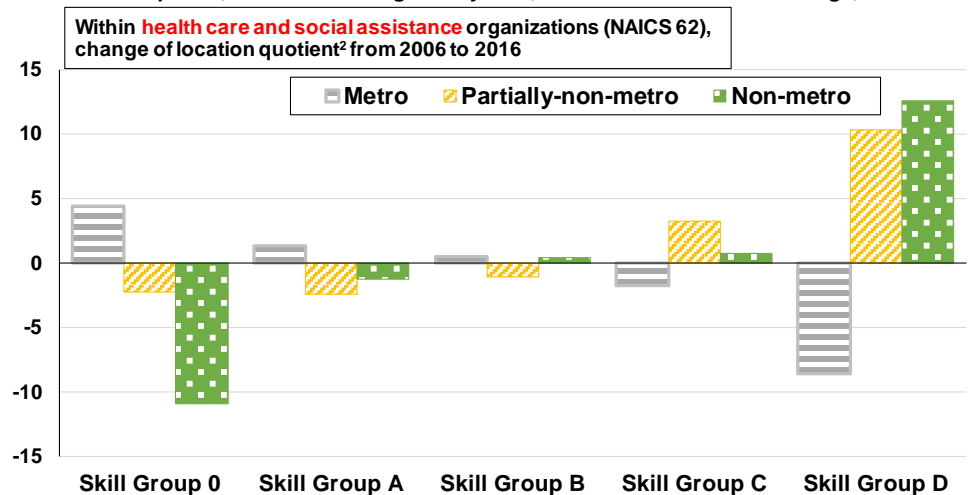
- Over 90% of employment in organizations providing health care and social assistance services is in Skill Groups "A", "B" and "C".
Between 2006 and 2016, the share of employment in these occupation groups in non-metro census divisions changed at the same pace as in Ontario as a whole. A location quotient measuring relative change showed virtually no difference in the pace of change.
Cautionary caveat: We are using a delineation of skills as delineated by Employment and Skills Development Canada...

Why look at the mix of occupations?

The change in the occupation mix in a given sector shows whether a type of region is gaining or losing employment in a given skill group, relative to the change in other types of regions.

The objective of this Fact Sheet to show the change in the mix of occupations (grouped into skill groups) in organizations providing health care and social assistance from 2006 to 2016.

Figure 1 Among health care and social assistance organizations, the share of non-metro employment in Skill Groups "A", "B" & "C" changed very little, relative to the Ontario average, 2006-2016



1. Occupations are classified to Skill Groups based on: Employment and Skills Development Canada. National Occupational Classification Matrix 2011... 2. A location quotient is a measure, for each industry sector, of the relative intensity of employment in a skill group in, say, non-metro census divisions, compared to the employment in the skill group for Ontario as a whole...

1 Occupations are classified to Skill Groups based on: Employment and Skills Development Canada. National Occupational Classification Matrix 2011... Group A usually requires a university education; Group B usually requires a college education or apprenticeship training...

2 Specifically, NAICS 62 in Statistics Canada. (2017) North American Industry Classification System: 2017 (Ottawa: Statistics Canada, Catalogue no. 12-501)...

3 From 1991 to 2001 in most industries, the share of employment in higher-skilled jobs increased (slightly) more in urban areas than in rural areas. See Erik Magnusson and Alessandro Alasia. (2004) "Occupational patterns within industry groups: A rural-urban comparison." Rural and Small Town Canada Analysis Bulletin...

Summary data for each sector is in an appendix.

Findings

Employment in health care and social assistance increased by 34% in Ontario from 2006 to 2016 (Table 1). The growth was somewhat smaller (25%) in non-metro census divisions (CDs) compared to a 32% increase in partially-non-metro CDs and a 38% increase in metro CDs.

The growth was relatively even across skill groups in non-metro and in partially non-metro CDs. In metro CDs, growth was higher in Skill Group "O" and

4 Appendix: Tables and Charts showing the Level and Change of Employment by Skill Group for each Industry Sector, by Type of Census Division, Ontario, 2006 - 2016.

5 Defined in "Rural Ontario's Demography: Census Update 2016." Focus on Rural Ontario (Guelph: Rural Ontario Institute, March)...

growth was lower in Skill Group “D”.

A location quotient (LQ) calculates a relative intensity (Columns 6 and 7 in Table 1). For example, Skill Group “A” represented 31% of employment in health care and social assistance in non-metro CDs in 2016. When we take this 31% share and divide by the 34% share at the Ontario level (and multiply by 100), we generate an LQ (or relative intensity) of 91 (in Column 7) as a measure of the relative intensity of non-metro manufacturing employment in Skill Group “A”, relative to 100 for Ontario as a whole. A figure less than 100 indicates that this group has a lower share (or is less intensive) compared to Ontario as a whole. From 2006 to 2016, the non-metro LQ for employment in Skill Group “A” declined by 1 point (Figure 1). This decline may be interpreted as a relative (albeit very small) decline in the share (or percent) of non-metro employment in this occupation group, compared to the change for Ontario as a whole.

In 2016, the share of employment in each of the core occupation groups in health care and social assistance are essentially similar in non-metro CDs, compared to Ontario as whole. In non-metro CDs, 31% of employment was in Skill Group “A”, 33% of employment was in Skill Group “B” and 27% of employment was in Skill Group “C”. These shares were exactly the same in 2006. The stability (i.e., no change) in the shares (as shown by the lack of change in the LQs) indicates the stability in the shares in non-metro CDs was the same as for Ontario as a whole.

From 2006 to 2016, note the relatively larger decline in the LQ for Skill Group “O” and the relatively larger increase in the LQ for Skill Group “D”. These skill groups do not make up a large proportion of employment in the sector.

Summary

The relative intensity of employment in the main skill groups (i.e., Skill Groups “A” and “B” and “C”) stayed essentially the same from 2006 to 2016 in non-metro health care and social assistance. Small changes in absolute numbers did generate a relatively higher change in the relative intensity of non-metro employment in Skill Groups “O” and “D”.

Table 1. Level and change in skill¹ structure of employment in health care and social assistance organizations (NAICS 62), by type of census division in Ontario, 2006-2016

Skill group ¹	Number employed (,000)		Percent change, 2006 to 2016	Number employed as percent of total		Location quotient ²		
	2006	2016		2006	2016	2006	2016	Change ³
Metro census divisions⁴								
O	11	17	49	4	4	100	105	4
A	110	156	42	35	36	104	105	1
B	102	141	38	32	32	99	99	1
C	79	106	35	25	24	98	96	-2
D	16	18	15	5	4	92	83	-9
Total	317	437	38	100	100	100	100	0
Partially-non-metro census divisions⁴								
O	6	8	33	3	3	99	96	-2
A	57	75	31	32	32	97	95	-2
B	59	76	30	33	33	102	101	-1
C	45	61	35	25	26	100	103	3
D	10	13	33	6	6	105	116	10
Total	177	233	32	100	100	100	100	0
Non-metro census divisions⁴								
O	4	4	16	4	3	102	91	-11
A	31	39	26	31	31	92	91	-1
B	33	41	25	33	33	100	100	0
C	27	34	26	27	27	107	107	1
D	6	8	27	6	6	116	129	13
Total	102	127	25	100	100	100	100	0
All census divisions								
O	21	29	38	4	4	100	100	0
A	198	270	37	33	34	100	100	0
B	194	259	33	33	32	100	100	0
C	151	201	33	25	25	100	100	0
D	32	39	23	5	5	100	100	0
Total	595	798	34	100	100	100	100	0

1. Occupations are classified to Skill Groups based on: Employment and Skills Development Canada. **National Occupational Classification Matrix 2011** (<http://noc.esdc.gc.ca/English/NOC/Matrix2011.aspx?ver=11>). **Group A** usually requires a university education; **Group B** usually requires a college education or apprenticeship training; **Group C** usually requires a secondary school or occupation-specific training; **Group D** usually requires on-the-job training; **Group O** includes management occupations and self-employed individuals.

2. A location quotient is a measure, for each industry sector, of the relative intensity of employment in a skill group in, say, non-metro census divisions, compared to the employment in the skill group for Ontario as a whole. It is calculated as the percent of employment in a skill group in an industry sector for, say, non-metro census divisions, divided by the percent of employment in the skill group in the industry sector for Ontario as a whole (and then multiplied by 100).

3. The change in the location quotient indicates whether a given geographic group (e.g., non-metro census divisions) reported an increase or decrease in the percent of their employment in a given skill group, relative to Ontario as a whole.

4. The classification of census divisions is shown in Table 2 in "Rural Ontario's Demography: Census Update to 2016" **Focus on Rural Ontario** (March, 2017).

Source: OMAFRA, EMSI ANALYST database.

Rural Ontario Institute gratefully acknowledges the work of Ray Bollman in preparing this edition of **Focus on Rural Ontario**. Questions on data sources can be directed to RayD.Bollman@sasktel.net. Any comments or discussions can be directed to NRageltie@RuralOntarioInstitute.ca.