RCCbc Rural Emergency Services Research Symposium
June 7th, 2018

Framing the national landscape
Etienne van der Linde

Potential conflicts :

- Chair, Rural and Small Urban Section, CAEP
- Executive, Academic Section, CAEP
- Stroke / EMS / Membership / CPD Committees, CAEP
- CTAS NWG (CAEP / AMUQ / NENA / CPS / SRPC / PAC)
- National Council, SRPC
- Chair, ER Committee, SRPC

Dr. Etienne van der Linde M.B.Ch.B., CCFP, CPoCUS-IP, FRRMS
Clinical Assistant Professor, Disciplines of Emergency Medicine (Primary) and Family Medicine (Secondary), Faculty of Medicine, Memorial University, Newfoundland / Atlantic Provinces Medical Peer Review, ER assessor / Discipline Panel, College of Physicians and Surgeons NL & Labrador / Rural Physicians Advisory Committee, Newfoundland & Labrador Medical Association / NL Provincial Stroke Taskforce, Hyperacute Stroke Working Group / Regional Medical Adviser, Clarenville / Burin / Bonavista Peninsulas, Provincial Medical Oversight / Online Medical Control Physician, Provincial Ground Ambulances and Provincial Medical Flight Team / Regional Emergency Quality Council, Eastern Health / Site Chief of Emergency, Dr. G.B. Cross Memorial Hospital (Eastern Health)

AGM 2018 : Rural and Small Urban Section

Chair – Dr. Etienne van der Linde
evanderlinde@eastlink.ca

27 May 2018

Small Urban & Rural Section

CAEP 40th Anniversary Annual Report 2017-2018
Page 14 http://caep.ca/wp-content/uploads/2018/05/CAEP_AR2017-18_F.pdf

“Environmental scans have confirmed that rural Canada (for decades to come) will remain driven by and focused on a model of a generalist full scope of practice workforce, and the associated competencies”.

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Small Urban & Rural Section

- Re-established February 2016
- 1st priority was a collaborative (SRPC / CAEP / RCCbc / Labrador Institute) rural national certification cross sectional study
- (no Quebec data)
- (2016-2017 data)

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Small Urban & Rural Section

Objectives :

1. To establish the certification mix of MDs providing small urban and rural emergency care.

2. Secondary objective was to establish infrastructure and specialty support services.

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Small Urban & Rural Section

Methodology :

Facility Identification : CIHI / Provincial Ministries / Health Authority Web Presence Analysis.

Stats-Can population data (excluding catchment area) for the ED location

Small Urban & Rural Section

Telephonic or online survey, with contact to RN Manager or MD, list of MDs / locums utilised on ED schedule in last 3 months secured.

Subsequent cross-referencing with publicly available CFPC / Royal College membership lists and Provincial Licensing College lists.

Small Urban & Rural Section

Funding :
$ 5 000 SRPC

Administrative research assistant resources :
CAEP, SRPC, RCCbc, Labrador Institute
Standardised telephonic / online survey sheet

NATIONAL ED DISTRIBUTION

Large Urban	Population 100 000 +	87 (14.6 %)
Medium Urban	Population 30 000 - 99 999	53 (8.9 %)
Small Urban and Rural	Population 1 - 29 999	455 (76.5 %)
Total		595

ED DISTRIBUTION : SMALL URBAN AND RURAL

Population < 1 000	64/455 (14.1 %)
Population 1 000 – 9 999	312/455 (68.6 %)
Population 10 000 – 19 999	66/455 (14.5 %)
Population 20 000 – 29 999	13/455 (2.8 %)

STAFFING / CERTIFICATION MIX ANALYSIS

Data penetration : 309/455 EDs = 67.9 %

Non-EM Certified : 2 301/2 628 (87.6 %)
EM Certified : 327/2 628 (12.4 %)

Locums may be under-reported, and may skew in favour of EMs.

NATIONAL IMPLICATIONS

The Final Report of the Collaborative Working Group Emergency Medicine (CWG-EM) estimated a current national shortfall of 478 certified emergency physicians, expanding to 1 071 by 2020 (rural data penetration only 9 %) http://www.cfpc.ca/uploadedFiles/CWG0001_CWG-EM_Report-FINAL_WEB_Final_2.pdf

Canada's national annual EM training capacity is currently 190 (https://phx.e-carms.ca/phoenix-web/pd/main?mitid=1327# and https://phx.e-carms.ca/phoenix-web/pd/main?mitid=1330)

Based on the Final Report of the CWG-EM their shortfall translates to 2.5 years and 5.6 years of current national training capacity.

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NATIONAL IMPLICATIONS

This study, however, achieves a national staffing data penetration of 67.9 % of Small Urban and Rural EDs, and 2 301 non-EM certified MDs (87.6 % of small urban and rural staffing) provide care in this unique ED setting (Quebec not included).

This alone would currently consume 12.1 years of national EM training capacity, and note this is based only on only 67.9 % national small urban and rural data penetration / excludes Quebec.

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NATIONAL IMPLICATIONS

If the same staffing ratios (with 67.9 % data penetration) are extrapolated to 100 % small urban and rural penetration, there are potentially 3 389 non-EM certified MDs (without Quebec figures included) currently providing emergency care in this setting. This would require 17.8 years of national training capacity.

Assuming 100 % national Small Urban and Rural penetration (and inclusion of Quebec data), extrapolated onto the already pre-existing implications of the current Small Urban and Rural realities, that requirement would climb exponentially.

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NATIONAL IMPLICATIONS

Based on this study, nationally only 12.4 % of EM trained and certified MDs migrate to small urban and rural environments, which would expand the required training window to 97.6 years. This assumes ongoing concurrent maintenance and supplementation of urban needs (and no urban attrition).

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NATIONAL IMPLICATIONS

Using the same EM certification rural penetration of 12.4 % for the extrapolated staffing, this would consume 143 years of current national EM training capacity.

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STAFFING / CERTIFICATION MIX ANALYSIS

MD	421 (16 %)
MCFP	416 (15.8 %)
CCFP	1 464 (55.8 %)
CCFP (EM)	308 (11.7 %)
FRCPC (EM)	19 (0.7 %)
FRCPC (PEM)	0 (0 %)
Total	2 628

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DISTRIBUTION OF EM CERTIFIED COHORT

Population < 1 000	3/194 (1.5 %)
Population 1 000 – 9 999	175/1 705 (10.3 %)
Population 10 000 – 19 999	132/682 (19.4 %)
Population 20 000 – 29 999	17/47 (36.2 %)

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ANCILLARY HIGHLIGHTS

Data penetration : 418/455 (92 %)

- ICU on site : 65/418 (15.6 %)
- 4 core specialties on site : 33/418 (7.9 %)

- Internist on site - 86/419 (20.5 %) / Surgeon on site - 116/419 (27.7 %) / O & G on site - 81/419 (19.3 %) / Pediatrics on site - 45/419 (10.7 %) / Anaesthesia on site - 113/419 (27 %)

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ANCILLARY HIGHLIGHTS

- Lab 24 hours : 378/419 (90.2 %)
- CT Scanner on site : 97/418 (23.2 %)
- MRI Scanner on site : 20/419 (4.8 %)
- Plain X Ray 24 hours : 370/419 (88.3 %)
- Bedside U/S in ER : 265/418 (63.4 %)

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ANCILLARY HIGHLIGHTS

- Chemo on site : 132/419 (31.5 %)
- Dialysis on site : 96/419 (22.9 %)

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evanderlinde@eastlink.ca