



Physician Workforce Planning

Methodology & Model – Review

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Health Region Project

1. The Reasons
2. Purpose and Baseline Methodology
3. Departmental Planning Parameters
4. Sample Departmental Report
5. Conclusion & Next Steps



1. Why do Physician Workforce Planning?

Context:

1. Demographic shift in patient population
2. Demographic shift in physician population
3. Impact of licensing/ training changes in early 1990's
4. Lifestyle evolution in broad physician group and cohort specific
5. Evolution in payment models
6. Changing service delivery models
7. Changing local infrastructure
8. HHR Challenges



1. Why do Physician Workforce Planning?

Advantages:

- Explicit assumptions
- Data- based (Integrating supply, demand, capacity)
- Engagement with Region Clinical Departments and Divisions
- “Local” conditions and perspectives incorporated in a transparent manner
- Alignment with Capital Planning and HHR recruitment
- Transparent and understandable to external stakeholders (Government, Medical Assoc., etc.)



1. Why do Physician Workforce Planning?

Advantages (continued):

- Easily maintained
- Tighter confidence intervals with future projections
- More reliable recruiting efforts (Better match between recruits and needs)
- More systematic approach (less adhoc recruitment)
- Enhanced credibility with public and other stakeholders



2. Baseline Methodology

– Purpose & Principles

- **Purpose**

- [Client]contracted SSM Inc. to deliver a standardized methodology, framework, & model for physician workforce planning

- **Methodology – Principles e.g.**

- Baseline versus Department (& specialty)-specific Determinants
 - **Baseline determinants are generally applicable across all Departments**
- Balance productivity with sustainability;
 - **Assume the goal is a 50 hour work week plus on-call hours.**
- Balance comprehensive on-call resources with a sustainable call schedule;
 - **Assume sustainable on-call frequency i.e. 1:4 across specialties.**
- Incorporate appropriately trained alternative care providers
 - **Integrate where clearly quantifiable e.g. surgical assistant's, bedside & ward physicians.**



2. Baseline Methodology

– Principles cont...

■ Methodology – Principles e.g. cont...

- Balance timely and appropriate access to services with “demand” for immediate access;
 - **The Minimum requirement is to meet incremental need as defined by age/gender adjusted population growth. The low and high range of additional requirements will be defined by relevant evidence-based determinants at the Departmental and/or Divisional level**
- Access proxies - Defining, measuring, and managing wait times/lists;
 - **Use wait list/time where methodology is robust and standardized.**
- Differentiating between Need and Demand;
 - **Apply evidence-based assessment of needs.**
- Full-time Equivalents (FTEs):
 - **Define using quantified clinical and academic services, hours of work, billings, comparative measures, supplemented by time and motion adhoc study data.**



2. Baseline Methodology

- Need Assessment

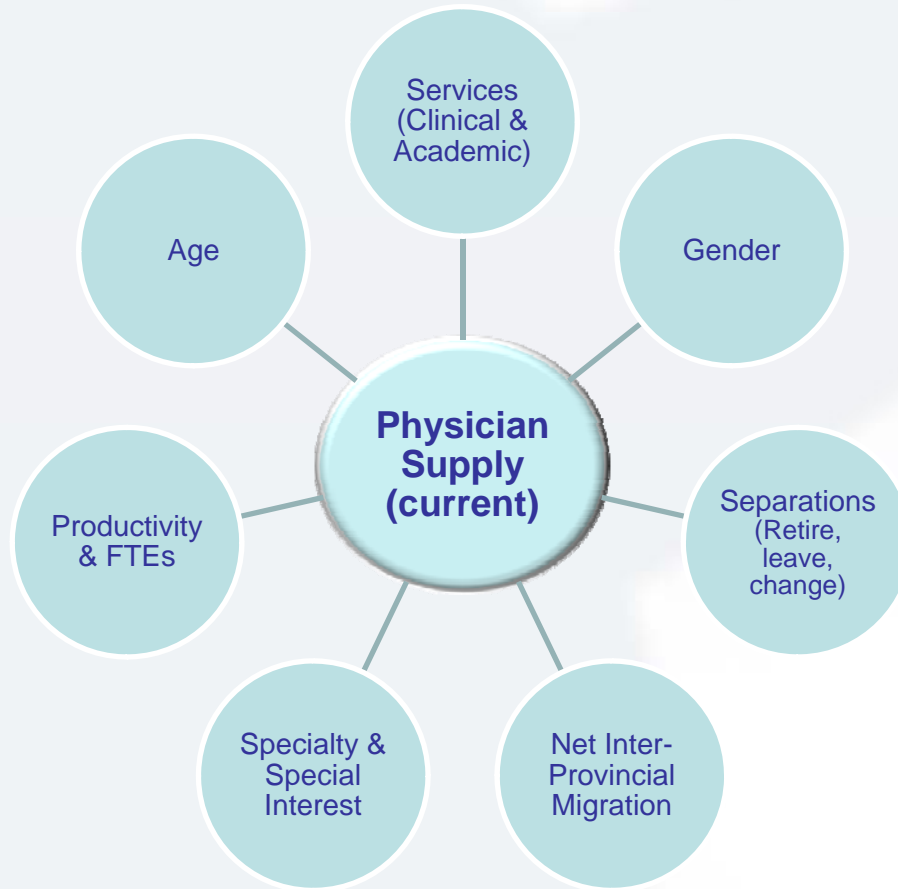
- Baseline Model – Key Determinants of Physician Need



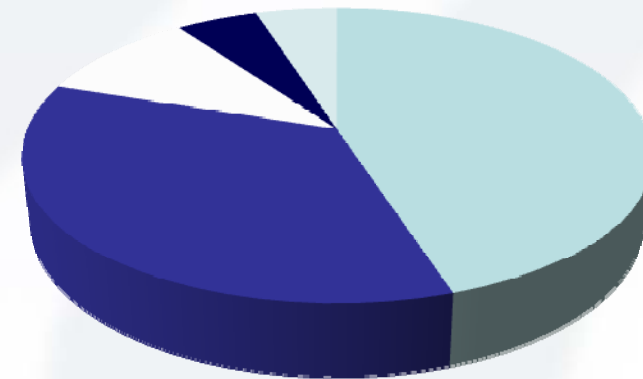
2. Baseline Methodology

– Supply Assessment

- Baseline Model – Key Determinants of Physician Supply



Future Physicians

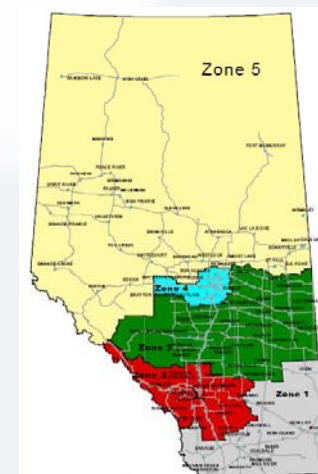


- In-Prov Residency Programs
- Out-of-Prov Residency Programs
- Foreign Trained
- Fellows
- Inter-Prov Migration



3. Objective of Baseline Model & Methodology

- Single accessible source of consistent, valid, reliable information on common determinants of physician need and supply i.e.
 - Need
 - Population demographics and geography (e.g. postal code segmentation of GP distribution).
 - Disease incidence and prevalence
 - Core programs and services
 - Supply
 - Counts, FTE equivalents, specialties, special interests, demographics, movement, separations.
- Generate baseline reporting on future need and supply for planning purposes.



4. Conclusions

- **Applicability**
 - Urban, Rural
 - Generalists, Specialists
 - Geographical segmentation
- **Management**
 - Standardized methodology
 - Standardized baseline data
 - Web-enabled for distributed access
 - Evidence based and strategic plan focused
- **Next Steps**
 - @Baseline: Adopt a common model, methodology and data-based application.



APPENDIX A. Departmental Planning Report: Part A - Baseline Determinants



DEPARTMENT X: EXAMPLE BASELINE FORECAST REPORT

ZONE MODEL: BASELINE FORECAST										
DETERMINANT	2009	2010	2011	2012	2013	2014	2015	TOTAL	. PG Residents	Canada PG Residents
Sustainability (Change in hrs/wk)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.1)		
Gender Shift (male to female)	(0.5)	(0.1)	(2.4)	(0.6)	(1.7)	(3.3)	(2.5)	(11.1)		
NIPM & RFA	0.2	0.2	0.2	0.2	0.2	0.2	0.2	1.3		
Separations	(9.1)	(6.8)	(6.6)	(6.6)	(6.8)	(6.5)	(6.6)	(49.0)		
SUBTOTAL - REPLACEMENT FTEs	(9.4)	(6.7)	(8.9)	(7.0)	(8.4)	(9.7)	(8.9)	(59.0)	23.6	35.4
FTEs - Population Growth	(4.2)	(4.1)	(4.1)	(3.9)	(3.9)	(3.9)	(3.8)	(27.8)	11.1	16.7
SUBTOTAL RECRUITMENT - FTEs	(13.6)	(10.8)	(12.9)	(10.9)	(12.3)	(13.6)	(12.7)	(86.9)	34.7	52.1

- Gender Shift will require 11.1 added FTE to offset;
- Net Inter-Provincial Migration (NIPM) and Return from Abroad (RFA) will add 1.3 FTE;
- Retirement and slow down due to aging will require 49.0 FTE;
- Population (age/gender adjusted) growth will require 27.8 FTE.
- It is expected 40% (34.7 FTE) of recruitment will come from PG Residents and the balance (52.1 FTE) from other Provinces.



APPENDIX A. Departmental Planning Report: Part B – Departmental Determinants



DEPARTMENT X: EXAMPLE Department-Specific Determinants

DEPARTMENTAL ADJUSTMENTS/DETERMINANTS									
	2009	2010	2011	2012	2013	2014	2015	TOTAL	REFERENCE
POPULATION BASED									
	0.30	12.30	4.20	1.00	1.00	1.00	1.00	20.80	Capital Impact Plan
	7.80	5.00	4.00	0.00	0.00	0.00	0.00	16.80	Program Impact Plan
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	OP Wait times
SUBTOTAL	8.10	17.30	8.20	1.00	1.00	1.00	1.00	37.60	
OTHER DETERMINANTS									
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	No Changes anticipated
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	No Changes anticipated
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	No Changes anticipated
	0.50	0.00	0.00	0.00	0.00	0.00	0.00	0.50	
	0.00	0.00	0.15	0.15	0.15	0.15	0.15	0.77	
SUBTOTAL	0.50	0.00	0.15	0.15	0.15	0.15	0.15	1.27	
TOTAL	8.60	17.30	8.35	1.15	1.15	1.15	1.15	38.87	(Less population growth)