

#### Diabetic Eye Care; Workforce Challenges and opportunities Hugh R. Taylor, AC, MD

April 2013 Bangkok How many ophthalmologists in practice and training worldwide?



- Study designed and conducted by ICO in 2010
- Aim: to capture the *dynamics* of the global ophthalmic population, including residents
- Of the 193 countries surveyed, 192 responded (represents 99.99% of the global population)
- total number of ophthalmologists in the world

### 204,909

 ranging from 28,338 in China to 0 in some Small Pacific Islands



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# Percentage of Ophthalmologists doing surgery (67 countries)









Ophthalmologists growth rate	1.20%
Population growth rate	0.77%
Difference	0.43%

On average, the ophthalmic population is growing slightly faster than the general population.



#### Ophthalmic Growth Rate vs. 60+ Population Growth Rate



	All Ages	60+
Ophthalmologists growth rate	+ 1.2%	+ 1.2%
Population growth rate	+ 0.77%	+ 2.9%
Actual growth rate	+ 0.43%	- 1.7%

On average, the population aged 60+ is growing more than twice as fast as the number of ophthalmologists.

 $\checkmark$  ophthalmic population is <u>declining</u> 1.7% per year compared to the population aged 60+.







- If no additional action taken and assuming a 3% actual growth rate
  - 58 years to reach 25 O'gists per Mo pop. (MICs)
  - 97 years to reach the current High Income countries level (80 per Mo pop.)



#### **Training of Ophthalmologists**



- Training more Ophthalmologists is obviously needed
- But training Ophthalmologists only is not the solution
- Need to training eye care teams, focused on meeting community needs



#### **Need for Training: Principles**



- Training in ophthalmology should focus on meeting needs of communities and populations, not just individuals
- Needs are best met by eye care teams, trained together to work as teams
- Comprehensive eye care should be an integral part of the health care system
- Community-level primary eye care should be integrated into primary health care
- Those who are trained need infrastructure, support and continuing professional development



#### Eye Care Personnel Needed



Teams of:

- Ophthalmologists (surgeons and "eye doctors")
- Subspecialists (pediatric, retina, etc.)
- Primary physicians trained in eye care
- Mid level eye personnel (MLEP) and nurses
- Optometrists or refractionists and opticians
- Managers and community eye health workers



#### DR screening workload (2011)



Country	No. of Diabetic patients	No. of O'gists	No. to be screened per Oʻgist, per day
India	61 million	11,000	18
Mexico	10.3 million	3,500	10
China	90 million	28.340	11
Brazil	12.4 million	11,350	4
Indonesia	7.3 million	1,240	20
Pakistan	6.3 million	1,860	11







#### The Patient Journey is like a Leaky Pipe







To engage national and international ophthalmologic societies and individual ophthalmologists

in an initiative to reduce vision loss due to diabetes worldwide through education and training and

by working in collaboration with other organizations and health professionals

to establish integrated systems of eye care for people with diabetes.



#### Goals



- **A. Technical Guidelines**
- **B.** Education
- **C. System Evaluation**







- Define the knowledge, skills and other competencies needed by ophthalmologists and other providers
- Early detection and treatment of diabetic retinopathy
- Effective training and continuing professional development programs.
- Promulgate through primary care and specialist networks
- Incorporate into ICO Education Spectrum;

Curricula, exams, fellowships, WOC program, CPD, teach the teachers etc









To develop and promulgate technical guidelines

for screening of diabetics and assessment and treatment of people with diabetic retinopathy and other ocular complications of diabetes.





To develop a framework for

the evaluation of public health approaches to detection and treatment of diabetic retinopathy and

to stimulate development, strengthening and monitoring of relevant health systems.



#### Steps



- 1. Explore collaborations
- 2. Constitute an ICO Task Force
- 3. Collate existing guidelines
- 4. Evaluate and identify gaps
- 5. Guidelines to cover screening, assessment and treatment that allow for available resources
- 6. Gain consensus
- 7. Promulgate through primary care and specialist networks
- 8. Incorporate into ICO Education Spectrum
  - Curricula, exams, fellowships, WOC program, CPD, teach the teachers etc
- 9. Participate in global meetings, this workshop, WDC etc

