Beyond Indicators: Achieving system impacts through performance measurement & reporting

Paris, France
31 Oct–3 Nov 2016

Mobilising Action
Inspiring Change

Hosted by:

La Ligue contre le cancer
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1. Introduction to the Session
   • Dr. Heather Bryant
2. NCD Global Monitoring Framework & WHO Indicators in Cancer Control
   • Dr. André Ilbawi
3. Cancer profile and performance indicators in China
   • Dr. You Lin Qiao
4. Using performance data to power the national cancer plan – lessons from France
   • Dr. Philippe Bousquet
5. Using quantitative and qualitative performance data to evaluate low-risk prostate cancer treatment in Canada
   • Mr. Rami Rahal
6. Questions and Answers / Panel Discussion
Today’s Panel

• Heather Bryant, **MD, PhD**  
  *Vice President, Cancer Control*  
  *Canadian Partnership Against Cancer*

• André Ilbawi, **MD, PhD**  
  *Technical Officer*  
  *Department for Management of Non-communicable Diseases, Disability, Violence and Injury Prevention*  
  *World Health Organization (WHO)*

• Youlin Qiao, **MD, PhD**  
  *Director, Dept. of Cancer Epidemiology, National Cancer Center*  
  *Cancer Hospital, Chinese Academy of Medical Sciences & Peking Union Medical College*

• Philippe Jean Bousquet, **MD**  
  *Responsable département Observation, Veille et Evaluation*  
  *Institut National du Cancer (INCA)*  
  *France*

• Rami Rahal, **MBA**  
  *Director, System Performance & Surveillance*  
  *Canadian Partnership Against Cancer*
Beyond Indicators: Achieving system impacts through performance measurement & reporting

Heather Bryant, MD, PhD
Canadian Partnership Against Cancer
For National Cancer Control

1. Clinical and Corporate Quality and Process Indicators
2. Medical/Clinical/Program Indicators at Province Level
3. National/Province Driver Indicators
4. National Outcome Indicators

Big Dots

Little Dots
Potential roles for national cancer control organizations

Development of driver indicators, in collaboration with practice leaders, in key areas
Even with big dots, you can paint a pretty interesting picture
NCD Global Monitoring Framework & WHO Indicators in Cancer Control: Understanding current targets and anticipating future needs

Dr. André Ilbawi
Department for Management of Non-communicable Diseases, Disability, Violence and Injury Prevention
World Health Organization
Outline

Defining indicators & health information systems

Where are we now?
NCD indicators in cancer management

Where do we want to be?
Report results in 2018, 2025, 2030
Expand role of indicators in cancer control
What gets measured gets done

Objective of data collection
• Assess service delivery
  • Type, quantity and quality of services
  • Performance or outcomes

Planning & implementing
• Set agendas and targets
• Accountability → identify areas for improvement
• Determine best practices
What gets measured gets done

• **Variables**
  - Types of indicator
  - Site, frequency of collection

• **Consider:**
  - Not value neutral
  - Huge resource requirement – financial and human
Where are we now?

NCD GMF
• Data collection for GMF
  – Variable by country and indicator
  – Reporting before 2018 UN High-level meeting follow-up

SDGs
• Link to NCD GMP

Other cancer indicators
• No global datasets
Global Monitoring Framework

**Mortality & Morbidity**
- Unconditional probability of dying between ages 30 and 70 years from cardiovascular diseases, cancer, diabetes or chronic respiratory diseases
- Cancer incidence by type of cancer

**Risk Factors**
- Harmful use of alcohol (3)
- Low fruit and vegetable intake
- Physical inactivity (2)
- Salt intake
- Saturated fat intake
- Tobacco use (2)
- Raised blood glucose/diabetes
- Raised blood pressure
- Overweight and obesity (2)
- Raised total cholesterol

**National Systems Response**
- Cervical cancer screening
- Drug therapy and counseling
- Essential NCD medicines & technologies
- Hepatitis B vaccine
- Human Papilloma Virus vaccine
- Marketing to children
- Access to palliative care
- Policies to limit saturated fats and virtually eliminate *trans* fats

Total number of related indicators in brackets

25 Indicators
Premature mortality

What?
• Likelihood of death for person aged 30yo to diet of NCDs by age 70
• Target: 25% reduction

Why?
• Outcome of policies/programmes/clinical services

Status
- Data collection: national vital registration records
- Limitations:
• Statistical challenges
• Ageism?
Premature mortality

- **SDGs:**
  - Target 3.4: reduction in premature mortality from all NCDs by one-third
  - Built on NCD GMF
  - Multiple relevant goals

- **Limited data currently available**
Cancer incidence

• **What?**
  – Age-standardized rates of cancer types

• **Target:** none specified

• **Why?**
  – Outcome of policies/programmes

• **Status**
  – Data collection: population-based cancer registries

  • Globocan
    – Limitations: registry coverage/availability
Cancer incidence

Estimated age-standardised rates (World) per 100,000

Trends in incidence of cancer in selected countries: age-standardised rate (W) per 100,000, women

*Regional data
NORDCAN (www.arccr.ru)
ECO (eco.iarc.fr)
England: www.ons.gov.uk

*Regional data
CIS.iarc.fr
Australia: www.aihw.gov.au
New Zealand: www.health.govt.nz
USA: seer.cancer.gov
Cervical cancer screening

- **What?**
  - %women aged 30–49yo screened for cervical cancer
- **Target:** none specified
- **Why?**
  - National systems response
- **Status**
  - Data collection: household survey (representative sample)
  - Limitations:
    - <30% countries have accurate data
    - National response data from NCD country capacity survey
Cervical cancer screening

<table>
<thead>
<tr>
<th>Region</th>
<th>Low-income</th>
<th>Lower-middle-income</th>
<th>Upper-middle-income</th>
<th>High-income</th>
</tr>
</thead>
<tbody>
<tr>
<td>AFR</td>
<td>&lt;10%</td>
<td>10-50%</td>
<td>&gt;50% but &lt;70%</td>
<td>&gt;=70%</td>
</tr>
<tr>
<td>AMR</td>
<td>&lt;10%</td>
<td>10-50%</td>
<td>&gt;50% but &lt;70%</td>
<td>&gt;=70%</td>
</tr>
<tr>
<td>EMR</td>
<td>&lt;10%</td>
<td>10-50%</td>
<td>&gt;50% but &lt;70%</td>
<td>&gt;=70%</td>
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<tr>
<td>EUR</td>
<td>&lt;10%</td>
<td>10-50%</td>
<td>&gt;50% but &lt;70%</td>
<td>&gt;=70%</td>
</tr>
<tr>
<td>SEAR</td>
<td>&lt;10%</td>
<td>10-50%</td>
<td>&gt;50% but &lt;70%</td>
<td>&gt;=70%</td>
</tr>
<tr>
<td>WPR</td>
<td>&lt;10%</td>
<td>10-50%</td>
<td>&gt;50% but &lt;70%</td>
<td>&gt;=70%</td>
</tr>
<tr>
<td>Low-income</td>
<td>&lt;10%</td>
<td>10-50%</td>
<td>&gt;50% but &lt;70%</td>
<td>&gt;=70%</td>
</tr>
<tr>
<td>Lower-middle-income</td>
<td>&lt;10%</td>
<td>10-50%</td>
<td>&gt;50% but &lt;70%</td>
<td>&gt;=70%</td>
</tr>
<tr>
<td>Upper-middle-income</td>
<td>&lt;10%</td>
<td>10-50%</td>
<td>&gt;50% but &lt;70%</td>
<td>&gt;=70%</td>
</tr>
<tr>
<td>High-income</td>
<td>&lt;10%</td>
<td>10-50%</td>
<td>&gt;50% but &lt;70%</td>
<td>&gt;=70%</td>
</tr>
</tbody>
</table>
Availability of essential medicines & technologies

• **What?**
  - Available & affordable medicines and technologies to treat NCDs

• **Target:** >80% of specified medicines & technologies

• **Why?**
  - National systems response

• **Status**
  • Data collection: facility survey
  • Limitations:
    – Limited data in facility survey for cancer-specific medicines and technologies
    – No specified cancer medicine/technology
**Where do we want to be?**

**GETTING TO 2018: PROGRESS MONITOR ON NCDs**
**PREPARING FOR THE THIRD HIGH-LEVEL MEETING ON NCDs**

The WHO Director-General will use the following 10 progress indicators to report, by the end of 2017, to the United Nations General Assembly on the progress achieved in the implementation of the four time-bound commitments included in the 2014 UN Outcome Document on NCDs:

<table>
<thead>
<tr>
<th>Time-bound commitments</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BY 2015</strong></td>
<td>1. Member State has set time-bound national targets and indicators based on WHO guidance</td>
</tr>
<tr>
<td>Consider setting national NCD targets for 2025</td>
<td>2. Member State has a functioning system for generating reliable cause-specific mortality data on a routine basis</td>
</tr>
<tr>
<td><strong>BY 2015</strong></td>
<td>3. Member State has a STEPS survey or a comprehensive health examination survey every 5 years</td>
</tr>
<tr>
<td>Consider developing national multisectoral policies and plans to achieve the national targets by 2025</td>
<td>4. Member State has an operational multisectoral national strategy/action plan that integrates the major NCDs and their shared risk factors</td>
</tr>
<tr>
<td><strong>BY 2016</strong></td>
<td>5. Member State has implemented the following four demand-reduction measures of the WHO FCTC at the highest level of achievement:</td>
</tr>
<tr>
<td>Reduce risk factors for NCDs, building on guidance set out in the WHO Global NCD Action Plan</td>
<td>a. Reduce affordability of tobacco products by increasing tobacco excise taxes</td>
</tr>
<tr>
<td></td>
<td>b. Create by law completely smoke-free environments in all indoor workplaces, public places and public transport</td>
</tr>
<tr>
<td></td>
<td>c. Warn people of the dangers of tobacco and tobacco smoke through effective health warnings and mass media campaigns</td>
</tr>
<tr>
<td></td>
<td>d. Ban all forms of tobacco advertising, promotion and sponsorship</td>
</tr>
<tr>
<td><strong>BY 2016</strong></td>
<td>6. Member State has implemented, as appropriate according to national circumstances, the following three measures to reduce the harmful use of alcohol as per the WHO Global Strategy to Reduce the Harmful Use of Alcohol:</td>
</tr>
<tr>
<td>Strengthen health systems to address NCDs through people-centred primary health care and universal health coverage, building on guidance set out in WHO Global NCD Action Plan</td>
<td>a. Regulations over commercial and public availability of alcohol</td>
</tr>
<tr>
<td></td>
<td>b. Comprehensive restrictions or bans on alcohol advertising and promotions</td>
</tr>
<tr>
<td></td>
<td>c. Pricing policies such as excise tax increases on alcoholic beverages</td>
</tr>
<tr>
<td><strong>BY 2016</strong></td>
<td>7. Member State has implemented the following four measures to reduce unhealthy diets:</td>
</tr>
<tr>
<td></td>
<td>a. Adopformed national policies to reduce population salt/sodium consumption</td>
</tr>
<tr>
<td></td>
<td>b. Adopted national policies that limit saturated fatty acids and virtually eliminate industrially produced trans fatty acids in the food supply</td>
</tr>
<tr>
<td></td>
<td>c. WHO set of recommendations on marketing of foods and nonalcoholic beverages to children</td>
</tr>
<tr>
<td></td>
<td>d. Legislation/regulations fully implementing the International Code of Marketing of Breast-milk Substitutes</td>
</tr>
<tr>
<td><strong>BY 2016</strong></td>
<td>8. Member State has implemented at least one recent national public awareness programme on diet and/or physical activity</td>
</tr>
<tr>
<td><strong>BY 2016</strong></td>
<td>9. Member State has evidence-based national guidelines/protocols/standards for the management of major NCDs through a primary care approach, recognized/approved by government or competent authorities</td>
</tr>
<tr>
<td><strong>BY 2016</strong></td>
<td>10. Member State has provision of drug therapy, including glycaemic control, and counselling for eligible persons at high risk to prevent heart attacks and strokes, with emphasis on the primary care level</td>
</tr>
</tbody>
</table>
Doing More in Cancer Control

• Gaps in existing monitoring and evaluation framework
  – Domains
  – Facility and household indicators
  – Appropriate targets
  – Quality indicators

• Available WHO support material
Thank you!
Cancer profile and performance indicators in China

You-lin Qiao
Dept. of Cancer Epidemiology, Cancer Hospital
Chinese Academy of Medical Sciences (CAMS)
Peking Union Medical College (PUMC)

UICC 2016 Congress, Paris, France
November 1, 2016
1. Cancer rates in China

- Cancer is the leading cause of death in China and is a major public health problem.
- An estimated **4,292,000 new cancer cases and 2,814,000 cancer deaths** would occur in China in 2015.
- **Lung cancer** is the most common incident cancer and the leading cause of cancer death.
- **Stomach, esophageal, and liver cancers** are also commonly diagnosed.

<table>
<thead>
<tr>
<th>SITE</th>
<th>ICD-10</th>
<th>INCIDENCE TOTAL</th>
<th>INCIDENCE MALE</th>
<th>INCIDENCE FEMALE</th>
<th>MORTALITY TOTAL</th>
<th>MORTALITY MALE</th>
<th>MORTALITY FEMALE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lip, oral cavity, &amp; pharynx (except nasopharynx)</td>
<td>C00-C10, C12-C14</td>
<td>48.1</td>
<td>31.1</td>
<td>16.9</td>
<td>22.1</td>
<td>15.3</td>
<td>6.8</td>
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<tr>
<td>Nasopharynx</td>
<td>C11</td>
<td>60.6</td>
<td>43.3</td>
<td>17.3</td>
<td>34.1</td>
<td>24.9</td>
<td>9.2</td>
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<tr>
<td>Esophagus</td>
<td>C15</td>
<td>477.9</td>
<td>320.8</td>
<td>157.2</td>
<td>375.0</td>
<td>253.8</td>
<td>121.3</td>
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<tr>
<td>Stomach</td>
<td>C16</td>
<td>679.1</td>
<td>477.7</td>
<td>201.4</td>
<td>498.0</td>
<td>339.3</td>
<td>158.7</td>
</tr>
<tr>
<td>Colon/rectum</td>
<td>C18-C21</td>
<td>376.3</td>
<td>215.7</td>
<td>160.6</td>
<td>191.0</td>
<td>111.1</td>
<td>80.0</td>
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<tr>
<td>Liver</td>
<td>C22</td>
<td>466.1</td>
<td>343.7</td>
<td>122.3</td>
<td>422.1</td>
<td>310.6</td>
<td>111.5</td>
</tr>
<tr>
<td>Gallbladder</td>
<td>C23-C24</td>
<td>52.8</td>
<td>24.5</td>
<td>28.3</td>
<td>40.7</td>
<td>18.8</td>
<td>21.8</td>
</tr>
<tr>
<td>Pancreas</td>
<td>C25</td>
<td>90.1</td>
<td>52.2</td>
<td>37.9</td>
<td>79.4</td>
<td>45.6</td>
<td>33.8</td>
</tr>
<tr>
<td>Larynx</td>
<td>C32</td>
<td>26.4</td>
<td>23.7</td>
<td>2.6</td>
<td>14.5</td>
<td>12.6</td>
<td>1.9</td>
</tr>
<tr>
<td>Lung</td>
<td>C33-C34</td>
<td>733.3</td>
<td>509.3</td>
<td>224.0</td>
<td>610.2</td>
<td>432.4</td>
<td>177.8</td>
</tr>
<tr>
<td>Other thoracic organs</td>
<td>C37-C38</td>
<td>15.2</td>
<td>8.2</td>
<td>5.0</td>
<td>6.5</td>
<td>4.1</td>
<td>2.3</td>
</tr>
<tr>
<td>Bone</td>
<td>C40-C41</td>
<td>28.0</td>
<td>16.4</td>
<td>11.6</td>
<td>20.7</td>
<td>12.4</td>
<td>8.3</td>
</tr>
<tr>
<td>Melanoma of the skin</td>
<td>C43</td>
<td>8.0</td>
<td>4.3</td>
<td>3.7</td>
<td>3.2</td>
<td>1.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Breast</td>
<td>C50</td>
<td>272.4</td>
<td>3.8</td>
<td>268.6</td>
<td>70.7</td>
<td>1.2</td>
<td>69.5</td>
</tr>
<tr>
<td>Cervix</td>
<td>C53</td>
<td>98.9</td>
<td>—</td>
<td>98.9</td>
<td>30.5</td>
<td>—</td>
<td>30.5</td>
</tr>
<tr>
<td>Uterus</td>
<td>C54-C55</td>
<td>63.4</td>
<td>—</td>
<td>63.4</td>
<td>21.8</td>
<td>—</td>
<td>21.8</td>
</tr>
<tr>
<td>Ovary</td>
<td>C56</td>
<td>52.1</td>
<td>—</td>
<td>52.1</td>
<td>22.5</td>
<td>—</td>
<td>22.5</td>
</tr>
<tr>
<td>Prostate</td>
<td>C61</td>
<td>60.3</td>
<td>60.3</td>
<td>—</td>
<td>26.6</td>
<td>26.6</td>
<td>—</td>
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<tr>
<td>Testis</td>
<td>C62</td>
<td>4.0</td>
<td>4.0</td>
<td>—</td>
<td>1.0</td>
<td>1.0</td>
<td>—</td>
</tr>
<tr>
<td>Kidney</td>
<td>C64-C66, C68</td>
<td>66.8</td>
<td>43.2</td>
<td>23.6</td>
<td>23.4</td>
<td>15.2</td>
<td>8.2</td>
</tr>
<tr>
<td>Bladder</td>
<td>C67</td>
<td>80.5</td>
<td>62.1</td>
<td>18.4</td>
<td>32.9</td>
<td>25.1</td>
<td>7.8</td>
</tr>
<tr>
<td>Brain, CNS</td>
<td>C70-C72</td>
<td>101.6</td>
<td>52.3</td>
<td>49.3</td>
<td>61.0</td>
<td>35.8</td>
<td>25.2</td>
</tr>
<tr>
<td>Thyroid</td>
<td>C73</td>
<td>90.0</td>
<td>22.2</td>
<td>67.9</td>
<td>6.8</td>
<td>2.5</td>
<td>4.3</td>
</tr>
<tr>
<td>Lymphoma</td>
<td>C81-C85, C88, C90, C96</td>
<td>88.2</td>
<td>53.0</td>
<td>35.2</td>
<td>52.1</td>
<td>32.7</td>
<td>19.4</td>
</tr>
<tr>
<td>Leukemia</td>
<td>C91-C95</td>
<td>75.3</td>
<td>44.4</td>
<td>30.9</td>
<td>53.4</td>
<td>32.0</td>
<td>21.3</td>
</tr>
<tr>
<td>All other sites and unspecified</td>
<td>ALL</td>
<td>178.1</td>
<td>95.5</td>
<td>82.6</td>
<td>94.0</td>
<td>55.0</td>
<td>39.0</td>
</tr>
</tbody>
</table>

CNS, central nervous system; ICD-10, International Classification of Diseases, 10th revision.

*The total number of cases projected for 2015 are based on the average incidence rates for the most recent 3 years (2009 to 2011) of data from 72 population-based cancer registries.
5-year survival by urban and rural

- Total 36.9%
- Female > Male (47.3% vs. 29.3%)
- Urban > Rural (54.4% vs. 38.4%)
- Big regional difference (29.9%~53.1%)

### TABLE 6. Expected 5-Year Survival for All Cancers Combined by Sex and Geographic Area: China, 2015

<table>
<thead>
<tr>
<th>AREAS</th>
<th>SEX</th>
<th>ASR INCIDENCE*</th>
<th>ASR DEATHS*</th>
<th>1-(M/I)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All areas</td>
<td>Total</td>
<td>201.1</td>
<td>126.9</td>
<td>36.9</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>234.9</td>
<td>165.9</td>
<td>29.3</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>168.7</td>
<td>88.8</td>
<td>47.3</td>
</tr>
<tr>
<td>Urban areas</td>
<td>Total</td>
<td>191.5</td>
<td>109.5</td>
<td>42.8</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>215.9</td>
<td>142.9</td>
<td>33.8</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>168.9</td>
<td>77.1</td>
<td>54.4</td>
</tr>
<tr>
<td>Rural areas</td>
<td>Total</td>
<td>213.6</td>
<td>149.0</td>
<td>30.3</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>259.6</td>
<td>195.1</td>
<td>24.8</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>168.5</td>
<td>103.8</td>
<td>38.4</td>
</tr>
<tr>
<td>North China</td>
<td>Total</td>
<td>213.2</td>
<td>134.5</td>
<td>36.9</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>240.3</td>
<td>171.9</td>
<td>28.5</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>187.0</td>
<td>97.5</td>
<td>47.9</td>
</tr>
<tr>
<td>Northeast</td>
<td>Total</td>
<td>189.2</td>
<td>116.4</td>
<td>38.5</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>208.4</td>
<td>146.9</td>
<td>29.5</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>169.8</td>
<td>85.5</td>
<td>49.6</td>
</tr>
<tr>
<td>East China</td>
<td>Total</td>
<td>193.7</td>
<td>115.6</td>
<td>40.3</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>224.1</td>
<td>152.8</td>
<td>31.8</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>165.8</td>
<td>80.6</td>
<td>51.4</td>
</tr>
<tr>
<td>Central China</td>
<td>Total</td>
<td>185.5</td>
<td>109.4</td>
<td>41.0</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>208.3</td>
<td>142.2</td>
<td>31.7</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>164.7</td>
<td>77.9</td>
<td>52.7</td>
</tr>
<tr>
<td>South China</td>
<td>Total</td>
<td>202.4</td>
<td>122.4</td>
<td>39.5</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>242.1</td>
<td>168.7</td>
<td>30.3</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>165.2</td>
<td>77.5</td>
<td>53.1</td>
</tr>
<tr>
<td>Southwest</td>
<td>Total</td>
<td>226.7</td>
<td>170.2</td>
<td>24.9</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>281.4</td>
<td>219.5</td>
<td>22.0</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>170.9</td>
<td>119.7</td>
<td>29.9</td>
</tr>
<tr>
<td>Northwest</td>
<td>Total</td>
<td>207.9</td>
<td>133.2</td>
<td>36.0</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>253.9</td>
<td>171.5</td>
<td>32.5</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>158.5</td>
<td>91.9</td>
<td>42.0</td>
</tr>
</tbody>
</table>

1-(M/I), complement to the mortality (M) to incidence (I) ratio; ASR, age-standardized mortality rate.

*Age-standardized rates for all cancers are based on the Segi standard population.
Trends in age-standardized cancer incidence for women in China from 2000 to 2011

Data source: 22 population-based Chinese cancer registries.

2. Causes of cancer: Risk factors linking sources with Industrialization and Urbanization in China

Proportion of rural population in China (%)

Proportion of population by region in China from 2005-2013

## Cancer mortality attributable to avoidable risk factors in China in 2005

<table>
<thead>
<tr>
<th>Risk factors</th>
<th>Men</th>
<th>Women</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PAF% N</td>
<td>PAF% N</td>
<td>PAF% N</td>
</tr>
<tr>
<td>Infectious agents</td>
<td>31.70 360673</td>
<td>25.30 165895</td>
<td>29.39 526567</td>
</tr>
<tr>
<td>Tobacco smoking</td>
<td>32.74 372264</td>
<td>5.02 32848</td>
<td>22.61 405112</td>
</tr>
<tr>
<td>Low fruit intake</td>
<td>13.70 155983</td>
<td>11.70 76858</td>
<td>13.00 232841</td>
</tr>
<tr>
<td>Alcohol drinking</td>
<td>6.69 76109</td>
<td>0.42 2774</td>
<td>4.74 84858</td>
</tr>
<tr>
<td>Low vegetable intake</td>
<td>3.90 44083</td>
<td>3.10 20413</td>
<td>3.60 64496</td>
</tr>
<tr>
<td>Occupational agents</td>
<td>3.08 34795</td>
<td>2.07 13536</td>
<td>2.70 48331</td>
</tr>
<tr>
<td>Environmental agents</td>
<td>0.04 429</td>
<td>1.79 11709</td>
<td>0.68 12138</td>
</tr>
<tr>
<td>Overweight and obesity</td>
<td>0.06 671</td>
<td>0.78 5111</td>
<td>0.32 5782</td>
</tr>
<tr>
<td>Physical inactivity</td>
<td>0.31 3513</td>
<td>0.21 1350</td>
<td>0.27 4863</td>
</tr>
<tr>
<td>Reproductive factors*</td>
<td>- -</td>
<td>0.47 3065</td>
<td>0.17 3065</td>
</tr>
<tr>
<td>Oral and HRT</td>
<td>- -</td>
<td>0.03 175</td>
<td>0.01 175</td>
</tr>
<tr>
<td>All the above</td>
<td>65.88 748944</td>
<td>42.80 280227</td>
<td>57.44 1029171</td>
</tr>
</tbody>
</table>

*Nulliparity, parity, % with age at first birth >= 30 years, Number of Months Breastfeeding

3. Comprehensive cancer prevention and control by monitoring framework, targets & indicators

1) Primary prevention

- **Control smoking**: reduced 80% lung Ca, 30% all cancers; National anti-smoking campaign; Beijing ban public smoking; Fully endorsed the WHO Framework Convention on Tobacco Control, and strengthen legislations.

- **Eliminate chronic infection**: Whole country HBV vaccination newborn; Speed up HPV vaccine licensures;

- **Nutrition Intervention/Education**: Reduce rural Deficiency population; Decrease urban Obesity; Promote Diet Guidelines for Chinese Residents; Increase the physical activities.
2) The 2\textsuperscript{nd} prevention: Early detection in high risk rural areas and cities

- Focus on upper gastric/intestinal, cervical, nasopharyngeal cancers in Rural, poor, low resource settings;

- Nationwide free Breast Cancer screening in rural women (1.2 million/3 years, 220 counties). 1.2 million annually since 2012.

- Nationwide free Cervical Cancer screening by Pap/VIA in rural women (10 million/3 years, 221 counties) = 7\% in 2009-2011. 10million annually in 1021 counties since 2012;

- Cancer screening pilot program in urban: lung, liver, stomach, colon-rectum, breast by over 14 provinces; Establish Demonstration centers: for health insurance, cost benefit, quality health care.
4. Summary

◆ There has been a marked increase in the numbers of cancers diagnosed in China. It may be explained by westernized lifestyle and environmental pollution with rapid industrialization and urbanization.

◆ Known risk factors of cancer explain a major causes (~60%) of cancer in China. Infectious agents represent a major cause of cancer among Chinese people. (>25%)

◆ Control of chronic infections may contribute for prevention of stomach, liver, cervix and other HPV related cancers.

◆ The priority of population-based cancer screening are cervix and upper-GI cancers in rural; lung, colon-rectum and breast cancers in city.
Using performance data to power the national cancer plan - Lessons from France

Philippe Jean Bousquet
UICC – November 2016
Cancer Plans

Promotes a decisive momentum in the fight against cancer
Breast cancer screening
Quality criteria defining the minimum standard of quality (chemotherapy radiotherapy and surgery)

2003

Better addresses health inequalities to ensure greater fairness and efficiency
Stimulates the analysis and consideration of individual and environmental factors to customize the treatment before, during and after illness
Strengthens the role of the physician at all times of the support

2009

Promotes early diagnosis and ensuring universal access to medical quality and innovation
Preserve the continuity and quality of life by providing a comprehensive care
Investing in prevention and research
Optimizes the management and organization for better efficiency

2014
Evaluation – Main steps

Onset (starting)

Ressources (inputs)

Productions (output)

Results (outcome)

Impacts (Effects / impacts)

Why?

What?

How?

ex ante

Follow-up, audit

Follow-up

Intermediate eval.

Ending eval.

ex post

Analyze the first measurable impacts and effectiveness

Arrangements and readjustments if needed

Measure impact and determine whether the action should be maintained / extended or not

Measure if there is an impact on the medium / long term
Cancer plan 2014-2019 – Indicators

« Health impact » objectives
Cancer plan objectives
« Daily actions » objectives

Impact
Result
Monitoring (milestones)

11
37
1-2 / year & action
Cancer plan 2014-2019 – Indicators

• Incidence, Mortality rates and Net survival
• Screening participations – Breast, colon-rectum or cervix cancer
• Outpatient breast cancer surgery
• Reduction of avoidable mortality
• Reduction of tobacco / alcohol use
• ...
Cervix cancer prevention

Net survival

![Net survival chart](chart.png)

- 1 an
- 5 ans
- 10 ans

- 1989-1993
- 1994-1998
- 1999-2004
- 2005-2010
Cervix cancer prevention

Net survival

Net survival
Cervix cancer prevention

Net survival

Incidence
Objective 1 - reducing inequalities in cervical cancer and reduce its impact
Smoking habits – Impact of tobacco costs

- Annual cigarette sales (millions of units)
- Average selling price of the best-selling brand (in euros)
Smoking habits – Tobacco consumption in 17’s

Launch of the National program of smoking reduction in 2014
Advantages / Pitfalls

• A better national policy against cancer
• Data driven not always in line with policy or public acceptation

• Distinction between impact and results indicators not easy
• Long term indicators
• Data not always available
• Frequent indirect / intermediary indicators

• Time consuming
More information on:

e-cancer.fr
Using quantitative and qualitative performance data to evaluate low-risk prostate cancer treatment in Canada

Rami Rahal
System Performance in Canada: An 8-year journey - 2009 to 2016
Special Reports/Spotlights

2010
- Lung Cancer in Canada: A Supplemental System Performance Report

2012
- Breast Cancer Control in Canada: A System Performance Special Focus Report

2013
- Population Health in Canada’s Largest Cities: A Cancer System Performance Spotlight Report

2014
- Examining Disparities in Cancer Control: A System Performance Special Focus Report

2015
- Cancer Stage in Performance Measurement: A First Look
- Prostate Cancer Control in Canada: A System Performance Spotlight Report

2016
- Quality and Sustainability in Cancer Control: A System Performance Spotlight Report
How do we incorporate the patient voice into a performance indicator report in a way that helps us tell the whole story?
The low-risk prostate cancer treatment challenge

• Treatment options for low-risk localized prostate Cancer include:
  1. Radiation and/or Surgery
  2. Active Surveillance
• Both have similar survival outcomes but varying side effects

QUESTION 1:

• What are treatment vs. active surveillance rates for low risk prostate cancer patients in Canada and how do they vary by province?
Percentage of men with low-risk prostate cancer who received various types of treatment, by province — 2013 diagnosis year

RT = radiation therapy.
MB and PE: “Surgery only,” “RT only” and “Surgery with adjuvant RT” were combined owing to small numbers.
NS: “RT only” and “Surgery with adjuvant RT” were combined owing to small numbers.
Data source: Provincial cancer agencies.
The low-risk prostate cancer treatment challenge

• It is important that patients are meaningfully involved in the decision-making process to ensure the chosen treatment aligns with their needs and quality of life preferences.

• To assess that, we conducted focus groups with 47 prostate cancer patients and survivors from across Canada.

QUESTION 2:

• To what extent do Canadian prostate cancer patients feel they were involved in making informed decisions on their treatment choices?
Focus group participants expressed a desire to be involved in the treatment decision-making process. Many participants felt completely informed about the treatment choices available to them.

“There were a number of options. And I was very fortunate in that I had that choice to make. The urologist was very respectful and did not try to influence me. He made it very clear that you definitely have a choice...he gave me all the facts in terms of the outcome and the percentages and the side effects.”
Reflections of men with prostate cancer: informed decision making
However, others felt they had not been properly engaged in the treatment decision-making process.

“His attitude was that he was in a rush. He had just told me I had cancer with a high probability of metastases and he didn’t offer any option. When I went back and he told me there were no metastases, still at that point, I had no option. ‘You’ll have radiotherapy, I’m sending you to [hospital]’, and when I got there no one ever offered any other option.”
Reflections of men with prostate cancer: informed decision making
Some participants felt they had opted for surgery or radiation therapy without full knowledge of the trade-offs between potential benefits and side effects. Others felt they may have made different decisions about their care had they been more informed. One participant offered the following advice for men diagnosed with prostate cancer:

“Make sure you explore all the [treatment] options and find out what the consequences are and don’t underestimate what some of them might be.”
Percentage of men with low-risk prostate cancer who had no record of treatment, by year, all provinces combined¹ — 2011, 2012 and 2013 diagnosis years

¹ Provinces combined include AB, SK, MB, NB, NS, PE and NL.

NB: Radiation therapy data were available starting January 1, 2012.

NL: Data not available in 2013. Data were available for 2011 and 2012.

Data source: Provincial cancer agencies.
Conclusion

A balance of meaningful quantitative data on patterns of care and relevant qualitative data on the patients’ experience create a powerful message for clinicians and decision makers that is more likely to influence positive change.
Thank you!

worldcancercongress.org