Vancouver 2010 Medical Services
Dr. Jack Taunton
Chief Medical Officer

Vancouver 2010
- One Festival
- Two World-Class Sport Competitions
- 27 Days of Sport
- 60 Days of Celebration

- January 2010
  Five-week Olympic and Paralympic arts festival begins
- February 12 to 28, 2010
  Olympic Winter Games
- March 12 to 21, 2010
  Paralympic Winter Games

VANOC Mission, Vision and Values

Mission
To touch the soul of the nation and inspire the world by creating and delivering an extraordinary Olympic and Paralympic experience with lasting legacies

Vision
A stronger Canada whose spirit is raised by its passion for sport, culture and sustainability

Values
Team | Trust | Excellence | Sustainability | Creativity

Vancouver 2010

The numbers

5,500 Olympic athletes and team officials
1,350 Paralympic athletes and team officials
82 Participating countries — the Olympic Games
42 Participating countries — the Paralympic Games
1.6 million Tickets available for 2010 events
25,000 Games volunteers
75 million Visits to vancouver2010.com
1.5 billion vancouver2010.com page views
3 billion Television viewers
10,000 Accredited media

Vancouver 2010

The dates
Preceded by 18 Sport Events in Winter 2008-09

Vancouver 2010: Competition Venues
### Competition Venues

- **Canada Hockey Place**  
  Ice Hockey  
  Capacity: 18,630

- **UBC Thunderbird Arena**  
  Ice Hockey, Ice Sledge Hockey  
  Capacity: 7,200

- **Vancouver Olympic Centre/Whistler Olympic Centre**  
  Curling, Wheelchair Curling  
  Capacity: 6,250

- **Richmond Olympic Oval**  
  Speed Skating  
  Capacity: 8,000

- **Pacific Coliseum**  
  Figure Skating and Short Track, Speed Skating  
  Capacity: 14,239

- **Cypress Mountain**  
  Freestyle Skiing, Snowboard  
  Capacity: 12,000

### Vancouver 2010: Non-Competition Venues

- **BC Place, Vancouver**  
  Olympic and Paralympic Opening Ceremonies, Olympic Closing Ceremony, Nightly Victory Ceremonies and Cultural festival

- **Whistler Medals Plaza**  
  Paralympic Closing Ceremony, Nightly Victory Ceremonies

- **Main Media Centre, Vancouver**

- **Whistler Media Centre**
2010 Winter Games: Sports

17 days of events from February 12 to 28, 2010

- 15 sports:
  - Alpine Skiing
  - Biathlon
  - Cross-Country Skiing
  - Curling
  - Figure Skating
  - Freestyle Skiing
  - Ice Hockey
  - Luge
  - Nordic Combined
  - Short Track
  - Speed Skating
  - Skeleton
  - Ski Jumping
  - Snowboard
  - Speed Skating

- 9 competition venue sites in Vancouver and Whistler

- 86 medal events

Paralympic Winter Games

10 days of events from March 12 to 21, 2010

- 5 sports:
  - Alpine Skiing
  - Biathlon
  - Cross-Country Skiing
  - Ice Sledge Hockey
  - Wheelchair Curling

- 4 competition venue sites
  - Alpine Skiing, Biathlon and Cross-Country Skiing at Whistler
  - Ice Sledge Hockey, Wheelchair Curling in Vancouver

- 64 medal events

VANOC Medical Services

Mission:
- To plan and deliver excellent Medical and Health Care Services for the Vancouver 2010 Olympic and Paralympic Winter Games and to leave a sustainable legacy for sports, health science and sports medicine both locally and nationally following the Games.

Customers:
- Athletes and Team Officials
- Olympic & Paralympic Family
- Workforce
- Spectators (including ticketed sponsors)
- Media (Broadcast and Press)

Medical Services Planning

MHQ

- MHQ is key at games time
- All services co-ordinated by MHQ located in polyclinic
- Daily reports from venues, regional managers, hospitals, public health, BCAS to MHQ
The Numbers

- Olympic Games
  - 1560 Medical Staff
  - 805 Volunteers
  - 612 External Contractors
- Paralympic Games
  - 871 Medical Staff
  - 393 Volunteers
  - 408 External Contractors

98% were from Canada. Others from the USA, Australia, South Africa, and Brazil.

Medical Services Staffing

Olympics

<table>
<thead>
<tr>
<th>Medical Personnel</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volunteers</td>
<td>80</td>
</tr>
<tr>
<td>Doctors</td>
<td>75</td>
</tr>
<tr>
<td>Nurses</td>
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<tr>
<td>Paramedics</td>
<td>12</td>
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<tr>
<td>Field Staff</td>
<td>12</td>
</tr>
<tr>
<td>Internal Emergency</td>
<td>4</td>
</tr>
<tr>
<td>Sports Medicine</td>
<td>2</td>
</tr>
<tr>
<td>Field Headquarters</td>
<td>3</td>
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<tr>
<td>Ski Patrol Supervisor</td>
<td>28</td>
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<td>Security Supervisor</td>
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<td>Field Paramedics</td>
<td>21</td>
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<tr>
<td>Field Paramedics</td>
<td>21</td>
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<tr>
<td>Paramedics</td>
<td>19</td>
</tr>
<tr>
<td>Field Physicians</td>
<td>19</td>
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<tr>
<td>Field Paramedics</td>
<td>20</td>
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<tr>
<td>Field Paramedics</td>
<td>21</td>
</tr>
<tr>
<td>TOTAL</td>
<td>489</td>
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</table>

Paralympics

<table>
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<th>Number</th>
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<td>Nurses</td>
<td>92</td>
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<tr>
<td>Field Staff</td>
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<td>Internal Emergency</td>
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<td>Sports Medicine</td>
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<td>Field Paramedics</td>
<td>18</td>
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<tr>
<td>Paramedics</td>
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<tr>
<td>Field Physicians</td>
<td>18</td>
</tr>
<tr>
<td>Field Paramedics</td>
<td>19</td>
</tr>
<tr>
<td>TOTAL</td>
<td>496</td>
</tr>
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</table>

The Numbers by Venue

Olympic Games

- CHP 44
- MMC 74
- CYP 126
- VVL 360
- PAC 52
- WVL 389
- ROO 29
- OFH 19
- WSC 43
- BRT 3
- UBC 27
- KIL 7
- VOC 26
- TLR 3
- WCR 91
- WOP 96

Paralympics

- UBC 34
- VOC 14
- WCR 55
- WOP 36
- MMC 16
- VVL 337
- WVL 390

External Contractors

Olympic Games

- 105 MMU
- 150 On Call Specialists
- 96 Paramedics
- 90 Ski Patrol and Technicians
- 38 Existing Venue Staff
- 50 Personal Service Contractors, VMOs, VMSs and Specialist Supervisors
- 19 Paid Staff

Paralympics

- UBC 34
- VOC 14
- WCR 55
- WOP 36
- MMC 16
- VVL 337
- WVL 390
External Contractors
Paralympic Games

- 105 MMU
- 150 On Call Specialists
- 96 Paramedics
- 90 Ski Patrol & Technicians
- 3 Existing Venue Staff
- 27 Personal Service
- 18 Paid Staff

Village Polyclinics

- Polyclinic Services included:
  - Primary care
  - Sport medicine
  - Emergency medicine and trauma care
  - Surgical consultations
  - Imaging – X-ray, MRI, CT scan, ultrasound (fixed and mobile)
  - Lab Services – CBC, urinalysis, chemistry, cultures
  - Pharmacy
  - Dental Clinic
  - Eye Clinic & ENT Clinic
  - Public Health Services

Village Polyclinics

- Consultants
  - Dermatology
  - Surgery – orthopaedics, neurosurgery and general surgery
  - Internal Medicine – cardiology, respirology, infectious diseases
  - Neurology
  - ENT
  - Gynaecology
  - Nutrition
  - Sport Psychology

Whistler Polyclinic
Whistler Polyclinic

Village Polyclinics
- Therapy:
  - Physiotherapy
  - Massage Therapy
  - Chiropractic
  - Sports Acupuncture
- Podiatry
- Orthotics, Bracing and Prostheses
- Wheelchair repair
- Other Services
  - Interpretation services
  - Doping Control Station in or near polyclinic
  - Regeneration and Recovery Centre – including massage and hydrotherapy

Fully Integrated Therapy

Recovery Centre & Fitness Centre

Making the Polyclinics Full Service
- $5.8 Million contribution by Friends of the Games
- $1.35 Million from our donation program
- This supplied our emergency equipment, AEDs, pharmacy, lab, full dental and supplies including mouthguards, ophthalmology, optometry, contact lenses and glasses, ENT, full therapy, interfacing and computers, recovery centre, VANOC vaccination for H1N1, seasonal flu and hepatitis for the food handlers, bracing and orthotics, airport clinic, imaging technical support, 10000 CPR kits and rescue breathers

Emergency / Disaster Planning
- Partnerships at various levels:
  - Federal – including NESS
  - Provincial
  - Vancouver Coastal Health
  - BCAS – including CBRNe
- Integrated planning exercises
  - Gold, Silver & Bronze plus venue specific
- Mobile Medical Unit - Whistler
  - GE Unit
  - Part of Polyclinic
  - Life, Limb and Organ Salvage
  - Cut off by road and air
Mobile Medical Unit

- Integrated into the Whistler Polyclinic
- Life, limb and organ salvage
- If Whistler cut off by road and air
- MCI

Whistler Surgical Services

Athlete Medical - Venues
- Sports medicine, primary care and emergency medical care
- Stations with appropriate equipment, supplies and medications
- Staffed as required for sport and venue by physicians, nurses, therapists, first aid providers
- Dedicated BCAS ambulances

Spectator Medical - Venues
- Non-accredited personnel
- May be accessed by workforce, volunteers, sponsors, media, Olympic and Paralympic Family
- Competition and non-competition venues
- Dedicated BCAS ambulances
**Hospitals**

- St. Paul's Hospital
- VGH

**Emergency Transportation**

- Partnership with BC Ambulance Service – provision of dedicated ambulances and paramedics
- Ambulances on site as determined by venue and sport needs – 44 total
- Helicopter as required by International Sport Federation (IF), venue and sport needs – 2 CCT helicopters
- Transport to Polyclinic or hospital as necessary

**IOC / VCH / VANOC Programs**

- Tobacco Free Games
  - Promotional activities
  - Athletes, Coaches, Officials, Olympic and Paralympic Families
  - Spectators and General Public
- HIV / AIDS Awareness
  - Promotional activities
  - Testing
- OVUS
  - Real time ultrasound from the field of play

**OVUS**

- 5 sites – Nordic, Cypress, long track and hockey (GM & UBC)
- GE Logic Ultrasound static and cine DICOM streaming loops
- Experienced MSK technologist
- Dedicated virtual VLAN – full security to isolate the project from other network traffic

**Vaccination Recommendations**

- pH1N1
- Seasonal Influenza
  - A/Brisbane/9/2007 (H1N1)-like virus
  - A/Brisbane/10/2007 (H3N2)-like virus
  - B/Brisbane/60/2008-like virus
- Measles, Mumps and Rubella
  - 2 doses at least one month apart
- Varicella
  - 2 doses at least one month apart
- Hepatitis B
- Tetanus / Diphtheria
- Meningococcal C conjugate

**Vaccination Recommendations**

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- Varicella
  - 2 doses at least one month apart
- Hepatitis B
- Tetanus / Diphtheria
- Meningococcal C conjugate
H1N1 / Pandemic Planning

- Partnerships with
  - VCH – lead on all public health matters
  - BCCDC
  - Close working relationships with agencies throughout Canada
- Monitoring local, national and international developments
- Strategies:
  - Communications to all customer groups
  - Public health measures
    - Hand washing / Hand sanitizers
    - Cough into sleeve
    - Workforce – stay home if sick

H1N1 / Pandemic Planning continued

- Vaccination recommendations
  - Recommend H1N1 and seasonal flu vaccine to all Games customers (at least 14 days before arrival in Canada)
  - H1N1 vaccine available to any Canadian who wants or needs it
  - H1N1 and seasonal flu clinics for paid staff
- Volunteer added to Provincial eligibility list – seasonal flu
- Vaccinations available in Polyclinics to countries unable to obtain at home – i.e. New Zealand and GB
- Surveillance and identification
  - Public Health nurses in Polyclinics – 23 in total
    - Rapid influenza testing
    - Cluster investigation
- Treatment
  - Self isolation recommendations
  - Anti-virals (e.g. tamiflu)
  - Outbreak measures

Public Health

- VCH Environmental Health Officers – 8
- Food
  - Villages
  - Vendors
  - Restaurants
- Air quality
  - Inside venues
  - Outside venues
- Water
  - This was summarized daily during Games time in the Public Health Bulletin – Health Watch

Language Services

- Provincial Language Services (PLS)
- Or VANOC Client Services
- NOC Assistants – many were fluent in the language of their NOC
- Total of 12 users of the Services
  - Russia 9
  - Armenia 2
  - Japan 1

Torch Relay

- 106 Days, 1000 communities for Olympic Torch Relay
- 10 days for the Paralympic Torch Relay
- 300 personnel, 1 MD, 1 Nurse
- Supplied pharmacy kit, ALS Kit, AED
- All personnel were given H1N1 vaccine before departure to prevent spread to vulnerable communities

Ambulance Transfers

From Venue to Hospital

<table>
<thead>
<tr>
<th>Ground</th>
<th>Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>116</td>
<td>8</td>
</tr>
<tr>
<td>115</td>
<td>7</td>
</tr>
<tr>
<td>114</td>
<td>6</td>
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<tr>
<td>113</td>
<td>5</td>
</tr>
<tr>
<td>112</td>
<td>4</td>
</tr>
<tr>
<td>111</td>
<td>3</td>
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<td>110</td>
<td>2</td>
</tr>
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<td>109</td>
<td>1</td>
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<td>108</td>
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<td>107</td>
<td>0</td>
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<tr>
<td>106</td>
<td>0</td>
</tr>
<tr>
<td>105</td>
<td>0</td>
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</tbody>
</table>

Ground = 137 and Air = 8
**OVERVIEW OF MEDICAL ENCOUNTERS**

<table>
<thead>
<tr>
<th></th>
<th>OLYMPICS</th>
<th>PARALYMPICS</th>
</tr>
</thead>
<tbody>
<tr>
<td># Accredited Medical Encounters</td>
<td>8,198</td>
<td>2,690</td>
</tr>
<tr>
<td># Spectator Medical Encounters</td>
<td>840</td>
<td>127</td>
</tr>
<tr>
<td># of Sports</td>
<td>15</td>
<td>5</td>
</tr>
<tr>
<td># of Athlete Encounters</td>
<td>2,732 (33%)</td>
<td>657 (25%)</td>
</tr>
</tbody>
</table>

**Medical Encounters = 9,038**

*Additional 3 occurred at YVR*
PRE-OPENING AND TRANSITION ENCOUNTERS

• Pre-Opening Jan 12th to Feb 3rd
  • 224 Medical Encounters

• Transition Period Mar 1st to Mar 5th
  • Between Olympic and Paralympic Games
  • 201 Medical Encounters

Accredited Encounters = 8,198

Athlete Encounters - Top 20 Countries

Total Athlete Encounters = 2732

Medical Encounters by Initial Health Provider

Medical Encounter by Sport

Medical Encounter by System
Laboratory

1213 Lab tests performed (VVL = 545; WVL = 668).

Pharmacy

**TOP 10 - OVERALL DRUGS DISPENSED**

<table>
<thead>
<tr>
<th>DRUG NAME</th>
<th># Rxs</th>
<th>DRUG NAME</th>
<th># Rxs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ibuprofen 200mg</td>
<td>68</td>
<td>Ibuprofen 400mg</td>
<td>72</td>
</tr>
<tr>
<td>Ibuprofen 400mg</td>
<td>32</td>
<td>Cepacol Lozenges</td>
<td>47</td>
</tr>
<tr>
<td>Acetaminophen 500mg Cap</td>
<td>25</td>
<td>Acetaminophen 500mg</td>
<td>38</td>
</tr>
<tr>
<td>Diclofenac 10% Gel</td>
<td>22</td>
<td>Tylenol #3</td>
<td>20</td>
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<tr>
<td>Tylenol #3</td>
<td>18</td>
<td>Xylocaine</td>
<td>20</td>
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<tr>
<td>Amoxicillin 500mg</td>
<td>18</td>
<td>Antiperspirant</td>
<td>17</td>
</tr>
<tr>
<td>Aspirin</td>
<td>12</td>
<td>Complexion</td>
<td>15</td>
</tr>
<tr>
<td>Ketorolac 10mg</td>
<td>12</td>
<td>Carmex lip balm</td>
<td>16</td>
</tr>
<tr>
<td>Ibuprofen 400mg</td>
<td>6</td>
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<td></td>
</tr>
<tr>
<td>Acetaminophen 500mg</td>
<td>3</td>
<td></td>
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</table>

**ATHLETES ONLY:**

**TOP 10 - OVERALL DRUGS DISPENSED**

<table>
<thead>
<tr>
<th>DRUG NAME</th>
<th># Rxs</th>
<th>DRUG NAME</th>
<th># Rxs</th>
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<tbody>
<tr>
<td>Ketorolac 10mg</td>
<td>7</td>
<td>Ibuprofen 400mg</td>
<td>6</td>
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<tr>
<td>Ibuprofen 400mg</td>
<td>6</td>
<td>Naproxen</td>
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<td>Tylenol #3</td>
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</tr>
<tr>
<td>Acetaminophen 250mg</td>
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<td>Zolpidem 5mg</td>
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<tr>
<td>Zolpidem 5mg</td>
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<tr>
<td>Amoxicillin 500mg</td>
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<td></td>
</tr>
<tr>
<td>Ibuprofen 200mg</td>
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<table>
<thead>
<tr>
<th>DRUG NAME</th>
<th># Rxs</th>
<th>DRUG NAME</th>
<th># Rxs</th>
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<tbody>
<tr>
<td>Diclofenac 10% Gel</td>
<td>6</td>
<td>Tylenol #3</td>
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<tr>
<td>Ibuprofen 200mg</td>
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<tr>
<td>Acetaminophen 500mg</td>
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<tr>
<td>Ibuprofen 200mg</td>
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</table>

A total of 1,197 Therapy sessions were provided (VVL = 883; WVL = 777).
Therapy

Imaging

<table>
<thead>
<tr>
<th>Modality</th>
<th>CHP</th>
<th>CYM</th>
<th>VVL</th>
<th>WVL</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>CT</td>
<td>6</td>
<td>0</td>
<td>34</td>
<td>50</td>
<td>90</td>
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<td>DR</td>
<td>4</td>
<td>0</td>
<td>116</td>
<td>272</td>
<td>392</td>
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<tr>
<td>MRI</td>
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<td>0</td>
<td>171</td>
<td>146</td>
<td>317</td>
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<td>4</td>
<td>44</td>
<td>65</td>
<td>114</td>
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<tr>
<td>Total</td>
<td>12</td>
<td>7</td>
<td>365</td>
<td>527</td>
<td>911</td>
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</tbody>
</table>

Total Images = 911

Dental

Dental Statistics

- Total Mouth Guards = 159 (6% of all athletes)
- Oral Screenings = 386 (14.5% of all athletes)
- Trauma Visits = 3
- Athlete Encounters = 603
- Dental = 13% of all encounters

Dental Visits = 1,074
### Public Health

Vancouver 2010 Olympics - Paralympic public health patient visits - Demographic characteristics

*Age missing for 15 patients;
†Gender missing for 13 patients

### Paralympic Medical Encounters

- Total encounters: 2717
  - Accredited: 2590
  - Spectators: 127
- Transfers:
  - Ground ambulance: 24
  - Non-ambulance: 6
  - Air ambulance: 8 (2 long line)
  - Hospitalizations: 7

### Paralympic Family Member Hospitalizations

<table>
<thead>
<tr>
<th>Hospital Site</th>
<th># of Inpatients</th>
<th># of Inpatient Days Stay</th>
<th># of Outpatients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Container ship (National Hospital)</td>
<td>7</td>
<td>14</td>
<td>5</td>
</tr>
<tr>
<td>Whistler Health Care Centre</td>
<td>-</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>7</strong></td>
<td><strong>24</strong></td>
<td><strong>4</strong></td>
</tr>
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</table>

### Paralympic Encounters by Accreditation

<table>
<thead>
<tr>
<th>Accreditation Category</th>
<th>Number of Encounters</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Athlete</td>
<td>657</td>
<td>25.4</td>
</tr>
<tr>
<td>IPC</td>
<td>61</td>
<td>2.4</td>
</tr>
<tr>
<td>IF/PNPC Officer</td>
<td>619</td>
<td>26.2</td>
</tr>
<tr>
<td>Media</td>
<td>6</td>
<td>0.3</td>
</tr>
<tr>
<td>Workforce</td>
<td>1,075</td>
<td>41.5</td>
</tr>
<tr>
<td>Other</td>
<td>111</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2,951</strong></td>
<td></td>
</tr>
</tbody>
</table>
**Laboratory**

390 Lab tests performed (VVL = 38; WVL = 352).

**Pharmacy**

<table>
<thead>
<tr>
<th>Prescription</th>
<th>VANCOUVER</th>
<th>WHISTLER</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATHLETE</td>
<td>31</td>
<td>71</td>
</tr>
<tr>
<td>DELEGATE</td>
<td>37</td>
<td>100</td>
</tr>
<tr>
<td>WORKFORCE</td>
<td>195</td>
<td>100</td>
</tr>
<tr>
<td>SITE/VENUE</td>
<td>27</td>
<td>130</td>
</tr>
<tr>
<td>Over-The-Counter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOT RECORDED</td>
<td>154</td>
<td>120</td>
</tr>
<tr>
<td>TOTAL</td>
<td>447</td>
<td>530</td>
</tr>
</tbody>
</table>

**Pharmacy**

**Top 10 overall Drugs dispensed**

<table>
<thead>
<tr>
<th>DRUG NAME</th>
<th>VANCOUVER</th>
<th>WHISTLER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ibuprofen 200mg tab</td>
<td>23</td>
<td>33</td>
</tr>
<tr>
<td>Ibuprofen 400mg tab</td>
<td>19</td>
<td>24</td>
</tr>
<tr>
<td>Acetaminophen 325mg</td>
<td>18</td>
<td>25</td>
</tr>
<tr>
<td>Cefalexin 200mg</td>
<td>18</td>
<td>22</td>
</tr>
<tr>
<td>Acetaminophen 500mg</td>
<td>17</td>
<td>23</td>
</tr>
<tr>
<td>Naproxen 500mg tab</td>
<td>15</td>
<td>32</td>
</tr>
<tr>
<td>Atebrin 5 mg tab</td>
<td>12</td>
<td>18</td>
</tr>
<tr>
<td>Ceferax 10mg cap</td>
<td>11</td>
<td>17</td>
</tr>
<tr>
<td>Acetaminophen 325mg tab</td>
<td>10</td>
<td>16</td>
</tr>
<tr>
<td>Naproxen 250mg cap</td>
<td>9</td>
<td>15</td>
</tr>
</tbody>
</table>

**Pharmacy**

**Athlete's only top 10 Drugs dispensed**

<table>
<thead>
<tr>
<th>DRUG NAME</th>
<th>VANCOUVER</th>
<th>WHISTLER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ketorolac 30mg/ml inj</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Ibuprofen 200mg tab</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Diazepam 5mg tab</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Zopiclone 7.5mg tab</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Ceferax 200mg</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Fragmin 500 u PFS</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Supedol 5mg</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Baclofen 10mg tab</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Ceftriaxone 1g</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Cetirizine 10mg tab</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Clindamycin 150mg cap</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Meloxicam 7.5 mg</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

**Pharmacy**

**Therapy**

A total of 930 Therapy sessions were provided (VVL = 323; WVL = 607).
POMA

- Paris
- Ossur
- Advanced Mobility
- Pentlands

- For
  - Orthotics
  - Bracing
  - Wheelchair, Sledge, Sit-Ski repair and welding
  - Prosthetic repair/replacement

POMA

Repairs by Venue (March 6 - March 21)

n = 190

POMA

Repairs by Equipment (March 6 - March 21)

n = 190

POMA

Repairs by NPC (March 6 - March 21)

n = 190

POMA

Repairs by Day (March 6 - March 21)

n = 190

Imaging

<table>
<thead>
<tr>
<th>Venue</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>UBC</td>
<td>5</td>
</tr>
<tr>
<td>VVL</td>
<td>66</td>
</tr>
<tr>
<td>WVL</td>
<td>222</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>296</strong></td>
</tr>
</tbody>
</table>
Key Lessons Learned

What worked:
Our PEOPLE were the key to success!

- Core team remained cohesive and committed.
- MHQ—communication with IOC, MOC and MED leadership was well co-ordinated and critical.
- Venue leads (VMO/VMS) took ownership of their venues and services (Games and/or sport experienced, skilled, accountable, team players, friendly).
- Volunteers great attitude and similar traits to above.
Key Lessons Learned - Staffing

What we learned:

• VMOs should be full time earlier (to assist with planning, training, equipment selection, etc.)
• Integrate key people in house early - VMOs, EMS (ambulance) planners, IT, logistics, volunteer coordinators, etc.
• Venues need significant resources for administration and reporting (2 venue leads= 1 clinical/1 admin)
• Load in, load out, and post games reporting are significant staff requirements

Key Lessons Learned - Services

What worked:

Early integration with:

• Public Health,
• Regional Hospital planners,
• BCAS,
• Ministry of Health
• Coroners Service
• Colleges (Nursing, Physiotherapy, Pharmacy, Physicians and Surgeons, Chiropractor etc)
• Expert Groups - Canadian Academy of Sports Medicine, Canadian Sports Physiotherapy Association, etc.

What worked:

• Test Events – essential for development and refinement of protocols, procedures, equipment, supplies, and integration with other services.
• Integrated Polyclinic team
• Multidisciplinary integrated therapy with sport experts
  • GE – full imaging service for first time at both Polyclinics
  • CT Scan critical with the bony, closed head and abdominal trauma

What worked:

• On-call specialists worked very well, 21 sub-disciplines appreciated by NOCs/NPCs
  • ensured our first mandate to not burden the health care system in the Olympic corridor
  • in Salt Lake City 444 were sent to hospital: 1198 in Torino and we hospitalized 14 in Olympics and 7 in Paralympics and for outpatient services 43 and 4
  • POMA – local consortium provided Paralympic level service for $225K vs $1.3 million
  • Early tours and familiarization of NOCs/NPCs with staff and resources = confidence in host team

What worked:

Communications is key!

• MHQ / Core team operations calls (2x/day during Games).
• Daily calls with partners - Province Emergency planning, BCAS and VCH public health.
• Communications from venues to MHQ and CMO / DMS for significant events.
• Daily IOC medical meetings with Dr. Patrick Schamasch.
• Public Health communications – Daily "Health Watch", and calls.
• Communicate frequently to NOCs, NPC's, IFs and IOC/IPC.

MHQ

- MHQ is key at games time
- All services co-ordinated by MHQ located in polyclinic
- Daily reports from venues, regional managers, hospitals, public health, BCAS to MHQ
Key Lessons Learned - Services
What worked:
- Enable significant self reliance by NOCs (Prescribing, ordering tests, etc.).
- Decreased burden on hospital health care system compared to previous Games
- Orthotics / bracing – 1st time
- Recovery and regeneration – 1st time
- Full service Pharmacies in both Polyclinics – outstanding contribution
  - Wrote Formulary and reference source for banned and restricted medications – on computers and available for NOCs and NPCs
  - 2075 prescriptions for Olympic and 977 for Paralympic Winter Games
  - Prepared kits for Torch Relay, Competition and Non-Competition venues

Key Lessons Learned - Services
What we learned:
- Clearly outline services and expectations for Workforce vs Athletes/OF etc.
- Test Events close to Games time: Lose the value of experience (because too late to change plan) and distraction to Games time planning.
- Test the EMR early and have modifications made.

Key Lessons Learned - Stuff (Equipment and Supplies)
What worked:
- Donations – from many different companies critical to provide level of service and resources ($7.2 million!)
- All specialised equipment donated or loaned–used post games as legacy (e.g. AEDs).
- Full imaging resources at both Polyclinics.
- Interface ”inside fence” to VCH for imaging, lab data; public health donated by VCH, Lifelab, Excelleris and GE
- Minimal waste and easy sourcing of supplies – flow through agreement with VCH and FHA.

Key Lessons Learned - Stuff
What we learned:
- MED Encounter System
  - more of a statistical tool than an EMR
  - required significant work to get report data
  - Suggest pre-existing medical specific EMR system – IOC to develop.
  - Test the EMR at sport events

Supplies
- Only partially customize supplies by venue – have finalised 6 months pre games (Pre-stocked carts worked well).
- Logistics person must know medical supplies and equipment
- Check quantities of equipment ordered.
- Load in and Load out is significant work.

Key Lessons Learned - Space
What worked:
- Polyclinics designed for flow and integration - self contained!
- Busy clinics (eye / dental / therapy / imaging) need good flow and space.
  - Equipment was first-class for all clinics.
- Mobile Medical Unit – was invaluable during and an important legacy after the Games.
- Outstanding Polyclinic lab services – 1213 tests Olympics and 390 tests Paralympics
  - Lifelab was one of our 12 Friends of the Games
  - Supplied all our laboratory technicians and 60 blood collection officers (all we needed for Anti-Doping)
- Recovery and Regeneration centres well used.
- Bookable space worked well

Key Lessons Learned - Space
What we learned:
- Confirm needs from all users in planning (ADP, IOC, IPC).
- Venue clinics partially standardised – must be creative and adaptable with set-up.
Key Lessons – Planning take homes

- Essential to develop and nurture close relationships with the external health care and regulatory partners to ensure full integration into the existing health care structures and processes.
- Close working relationship with VCH on planning, procurement of medical supplies and hospital and public health issues – had Rob Stewart as seconded for Medical Managers
- Close working relationship with IOC and IPC MED commission
- Strong early timeline planning with other functions – communicate with other function on needs and assumptions early
- Draw on previous games personnel at strategic times and ongoing
- Regular scenarios and testing a must
- Have a clear vision but be flexible and adaptable

LEGACIES OF 2010 MEDICAL

- Mobile Medical Unit plus auxiliary tractor trailer
- CT Scan for Whistler Health Centre
- Portable ultrasounds for Whistler Health Centre, St Paul’s and VGH Emergency Departments
- Mini C-Arm for Squamish Hospital
- 5 Logic E portable MSK for application
- For continuation of the 4 year pre-Games research – 1 Vivid-i and 1 Logic E to UBC Faculty of Medicine
- 15 NESS from BC and PHAC and 10 CBRNE units from BC Ambulance Service
- 225 AEDs from Medtronics distributed across Canada
- 10K CPR Anytime training Kits plus Rescue Breathers
- Hoist for Whistler High performance Centre
- Dental Chair for UBC Hockey Rink
- Over $120K of medical, pharmacy, dental and bracing supplies to Haiti

THANK YOU! MERCI!

QUESTIONS?