Mohammed AlJumah Sultan AlMubarak

On behalf of the Saudi Disability Registry Group

KACST and MoSA
Contents

- Introduction about Saudi Arabia
  - Population
  - Geography
- Disability Status in Saudi
- Some Data from WHS
- Perceived Challenges
- Saudi National Registry
  - Rational
  - Structure
  - Milestone
- Documentary presentation
## Saudi Arabia – Key Facts

<table>
<thead>
<tr>
<th>Saudi Arabia</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>2,149,690 sq. km</td>
</tr>
<tr>
<td>Natural resources</td>
<td>Petroleum, natural gas, iron, gold &amp; copper</td>
</tr>
<tr>
<td>Population (Million)</td>
<td>28.79 million</td>
</tr>
<tr>
<td>country comparison to the world: 47</td>
<td>Urban population: 82.3%</td>
</tr>
<tr>
<td>Life Expectancy: 74.58 years</td>
<td>Expatriates: 5.5m</td>
</tr>
<tr>
<td>Population Growth: 2.7% / Year</td>
<td></td>
</tr>
</tbody>
</table>

### Age Structure

- 0-14: 43%
- 14-39: 31%
- 40-64: 24%
- ≥65: 2%

[Image of a cityscape with a chart showing age distribution]
Saudi Arabia has an homogeneous population in that the people share common linguistic, religious and cultural values.
### Economic Overview

**Saudi Arabia – Key Facts**

<table>
<thead>
<tr>
<th>Category</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP Current Prices (Billion US$)</td>
<td>US$ $883.7</td>
</tr>
<tr>
<td>GDP per Capita</td>
<td>US$ 30,500</td>
</tr>
<tr>
<td>GDP Growth %</td>
<td>5.97%</td>
</tr>
<tr>
<td>GDP - composition, by sector of origin</td>
<td>Agriculture: 2%</td>
</tr>
<tr>
<td></td>
<td>Industry: 65%</td>
</tr>
<tr>
<td></td>
<td>Services: 33%</td>
</tr>
<tr>
<td>Budget</td>
<td>Revenues: $326.5 billion</td>
</tr>
<tr>
<td>Budget Surplus +13.1%</td>
<td>Expenditures: $234.8 billion</td>
</tr>
<tr>
<td>Inflation</td>
<td>4.91%</td>
</tr>
<tr>
<td>Total expenditure on health as % of GDP</td>
<td>5.6%</td>
</tr>
<tr>
<td>Exports</td>
<td>$388.4 billion (90% Oil)</td>
</tr>
<tr>
<td>Imports</td>
<td>$141.8 billion</td>
</tr>
</tbody>
</table>
No single source of national data for disability in KSA
No formal data collection approach for the country
Very Limited publications have addressed prevalence of disability in KSA
In 2007, MOH commissioned the national world health survey as part of the WHO international campaign.
Despite its limitation of being non disability specific survey, The WHS presented the first opportunity to get an estimate figures on the prevalence of disability in KSA
WHS Questionnaire Structure & Analysis

- Total of 8 self reported questions on Mobility, Self Care, Pain and Discomfort, Cognition, interpersonal activities, vision, sleep and energy affect.

- Questions are on 5 points LIKERT scale (ranging from Non to Extreme), asking the patients how they felt about each of the above domains in the past 30 days.

- A subject was considered disabled if he/she has answered any of the questions with “Severe”, or “Extreme”
WHS items involved in assessing disability

|--------------------------------|----------|----------|-------------|-----------|---------------------|

**Mobility**
- Q2002 Overall in the last 30 days, how much difficulty did you have with moving around?
- Q2003 In the last 30 days, how much difficulty did you have in vigorous activities, such as running 3 km (or equivalent) or cycling?

**Self Care**
- Q2004 Overall in the last 30 days, how much difficulty did you have with self-care, such as washing or dressing yourself?
- Q2005 In the last 30 days, how much difficulty did you have in taking care of and maintaining your general appearance (e.g. grooming, looking neat and tidy etc.)?

**Pain and Discomfort**
- Q2007 Overall in the last 30 days, how much of bodily aches or pains did you have?
- Q2008 In the last 30 days, how much bodily discomfort did you have?

**Cognition**
- Q2010 Overall in the last 30 days, how much difficulty did you have with concentrating or remembering things?
- Q2011 In the last 30 days, how much difficulty did you have in learning a new task (for example, learning how to get to a new place, learning a new game, learning a new recipe etc.)?

**Interpersonal Activities**
- Q2012 Overall in the last 30 days, how much difficulty did you have with personal relationship or participation in the community?
- Q2013 In the last 30 days, how much difficulty did you have in dealing with conflicts and tensions with others?

**Vision**
- Q2021.22 Do you wear glasses or contact lenses?
- Q2023 In the last 30 days, how much difficulty did you have in seeing and recognizing a person you know across the road (i.e. from a distance of about 20 meters)?
- Q2024 In the last 30 days, how much difficulty did you have in seeing and recognizing an object at arm’s length or in reading?

**Sleep and Energy**
- Q2016 Overall in the last 30 days, how much of a problem did you have with sleeping, such as falling asleep, waking up frequently during the night or waking up too early in the morning?
- Q2017 In the last 30 days, how much of a problem did you have due to not feeling rested and refreshed during the day (e.g. feeling tired, not having energy)?

**Affect**
- Q2018 Overall in the last 30 days, how much of a problem did you have with feeling sad, low or depressed?
- Q2019 Overall in the last 30 days, how much of a problem did you have with
Prevalence of Disability IN KSA is Considerably higher than that of other high income countries

Prevalence of Subjects reported Extreme or Severe/Extreme Difficulties in one or more domains
In KSA, the Patterns of Disability Severity level Differs Between Males and Females

<table>
<thead>
<tr>
<th>Disability Level</th>
<th>Men (n=2852; Weighted n=6,810,881.8) or % (SE)</th>
<th>Women (n=2947; Weighted n=7,086,101.6) % (SE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Severe/Extreme Disability</td>
<td>16.21 (0.86)</td>
<td>26.78 (1.07)</td>
</tr>
<tr>
<td>Extreme Disability</td>
<td>5.08 (0.49)</td>
<td>7.76 (0.58)</td>
</tr>
</tbody>
</table>

Source: Ministry of Health, Saudi Arabia 2007 WHS Survey
Prevalence of Extreme Disability is higher among older age groups.

<table>
<thead>
<tr>
<th>Age</th>
<th>N</th>
<th>Weighted N</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤19 Years</td>
<td>326</td>
<td>758,352</td>
<td>96.96(1.20)</td>
<td>3.04(1.20)</td>
</tr>
<tr>
<td>20-29 Years</td>
<td>1708</td>
<td>4,079,240.8</td>
<td>96.03(0.57)</td>
<td>3.97(0.57)</td>
</tr>
<tr>
<td>30-39 Years</td>
<td>1491</td>
<td>3,635,929.4</td>
<td>96.56(0.65)</td>
<td>3.44(0.65)</td>
</tr>
<tr>
<td>40-49 Years</td>
<td>1048</td>
<td>2,505,355.4</td>
<td>96.72(0.61)</td>
<td>3.28(0.61)</td>
</tr>
<tr>
<td>50-59 Years</td>
<td>582</td>
<td>1,422,294.3</td>
<td>91.19(1.32)</td>
<td>8.81(1.32)</td>
</tr>
<tr>
<td>60-69 Years</td>
<td>343</td>
<td>814,935.6</td>
<td>85.86(2.15)</td>
<td>14.14(2.15)</td>
</tr>
<tr>
<td>&gt;70 Years</td>
<td>301</td>
<td>680,869.8</td>
<td>61.39(3.11)</td>
<td>38.61(3.11)</td>
</tr>
</tbody>
</table>

Source: Ministry of Health, Saudi Arabia, 2007 WHS Survey
At older Age Women have Twice the Prevalence of Extreme Disability Compared to Men in the Same Age Group

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Weighted N</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Male</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤19 Years</td>
<td>168</td>
<td>377,797.4</td>
<td>96.29(2.04)</td>
<td>3.71(2.04)</td>
</tr>
<tr>
<td>20-29 Years</td>
<td>797</td>
<td>1,893,415.6</td>
<td>97.91(0.62)</td>
<td>2.09(0.62)</td>
</tr>
<tr>
<td>30-39 Years</td>
<td>647</td>
<td>1,595,906.4</td>
<td>98.55(0.61)</td>
<td>1.45(0.61)</td>
</tr>
<tr>
<td>40-49 Years</td>
<td>580</td>
<td>1,363,722.1</td>
<td>97.61(0.71)</td>
<td>2.39(0.71)</td>
</tr>
<tr>
<td>50-59 Years</td>
<td>304</td>
<td>726,991.9</td>
<td>94.02(1.47)</td>
<td>5.98(1.47)</td>
</tr>
<tr>
<td>60-69 Years</td>
<td>184</td>
<td>451,930.7</td>
<td>90.47(2.58)</td>
<td>9.53(2.58)</td>
</tr>
<tr>
<td>&gt;70 Years</td>
<td>172</td>
<td>401,111.6</td>
<td>62.64(4.35)</td>
<td>37.36(4.35)</td>
</tr>
<tr>
<td><strong>Female</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>≤19 Years</td>
<td>158</td>
<td>380,554.6</td>
<td>97.62(1.27)</td>
<td>2.38(1.27)</td>
</tr>
<tr>
<td>20-29 Years</td>
<td>911</td>
<td>2,185,825.2</td>
<td>94.41(0.93)</td>
<td>5.59(0.93)</td>
</tr>
<tr>
<td>30-39 Years</td>
<td>844</td>
<td>2,040,023</td>
<td>95.01(0.96)</td>
<td>4.99(0.96)</td>
</tr>
<tr>
<td>40-49 Years</td>
<td>468</td>
<td>1,141,633.3</td>
<td>95.65(1.04)</td>
<td>4.35(1.04)</td>
</tr>
<tr>
<td>50-59 Years</td>
<td>278</td>
<td>695,302.4</td>
<td>88.24(2.22)</td>
<td>11.76(2.22)</td>
</tr>
<tr>
<td>60-69 Years</td>
<td>159</td>
<td>363,004.9</td>
<td>80.12(3.61)</td>
<td>19.88(3.61)</td>
</tr>
<tr>
<td>&gt;70 Years</td>
<td>129</td>
<td>279,764.3</td>
<td>59.60(4.83)</td>
<td>40.40(4.83)</td>
</tr>
</tbody>
</table>

Source: Ministry of Health, Saudi Arabia, 2007 WHS Survey
## Disability Population

N=5799 (Weighted N=13,896,983.4), % (SE)

<table>
<thead>
<tr>
<th></th>
<th>None</th>
<th>Mild</th>
<th>Moderate</th>
<th>Severe</th>
<th>Extreme</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mobility</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moving Around</td>
<td>78.17 (0.68)</td>
<td>11.99 (0.52)</td>
<td>6.19 (0.38)</td>
<td>3.15 (0.29)</td>
<td>0.50 (0.10)</td>
</tr>
<tr>
<td>Vigorous Activities</td>
<td>63.58 (0.92)</td>
<td>15.23 (0.60)</td>
<td>9.01 (0.48)</td>
<td>8.25 (0.45)</td>
<td>3.92 (0.29)</td>
</tr>
<tr>
<td><strong>Self care</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self care</td>
<td>91.41 (0.43)</td>
<td>5.21 (0.35)</td>
<td>2.04 (0.20)</td>
<td>1.02 (0.15)</td>
<td>0.32 (0.08)</td>
</tr>
<tr>
<td>Appearance</td>
<td>91.60 (0.43)</td>
<td>4.71 (0.33)</td>
<td>2.49 (0.23)</td>
<td>0.87 (0.13)</td>
<td>0.33 (0.08)</td>
</tr>
<tr>
<td><strong>Pain and Discomfort</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bodily Pain</td>
<td>67.03 (0.84)</td>
<td>19.68 (0.64)</td>
<td>8.26 (0.44)</td>
<td>4.76 (0.36)</td>
<td>0.27 (0.08)</td>
</tr>
<tr>
<td>Bodily Discomfort</td>
<td>68.00 (0.84)</td>
<td>19.14 (0.64)</td>
<td>8.58 (0.46)</td>
<td>3.74 (0.32)</td>
<td>0.54 (0.12)</td>
</tr>
<tr>
<td><strong>Cognition</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memory</td>
<td>75.44 (0.75)</td>
<td>15.72 (0.60)</td>
<td>6.25 (0.38)</td>
<td>2.37 (0.23)</td>
<td>0.21 (0.08)</td>
</tr>
<tr>
<td>Learning</td>
<td>76.60 (0.75)</td>
<td>14.06 (0.58)</td>
<td>5.36 (0.37)</td>
<td>3.03 (0.28)</td>
<td>0.95 (0.15)</td>
</tr>
</tbody>
</table>

Source: Ministry of Health, Saudi Arabia
Implication Of Disability In KSA

- 2012 Survey report of Central Department of Statistics and Information, Saudi Arabia: 143,000 people above the age of 15 who are out of labor due to disability.
- MoSA Registered beneficiary for the financial support is approximately 400,000 person with disability.
Social Services in Saudi Arabia

Ministry of Social Affairs

Ministry of Labor

General Organization for Social Insurance
Social Service Programs address

- The unemployed
- Persons with disabilities
- Widows and widowers
- Females with no living family members to support them
- Orphans
- Families of those serving custodial sentences
- Victims of natural disasters
- Disability resulting from occupational hazards
Saudi Arabia Healthcare
# Saudi Arabia – Key Facts

- **Healthcare & Social Development Budget 2013**: USD 23.1 b. (+26%)

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total expenditure on health as % of GDP</td>
<td>5.0%</td>
</tr>
<tr>
<td>Total expenditure on health per Capita</td>
<td>$ 1,150</td>
</tr>
<tr>
<td>Physicians Density</td>
<td>0.94 physicians/1,000 population</td>
</tr>
<tr>
<td>Physicians (All Sectors):</td>
<td>66,014</td>
</tr>
<tr>
<td>Nursing</td>
<td>129,792</td>
</tr>
<tr>
<td>Hospital Bed Density</td>
<td>2.2 beds/1,000 population</td>
</tr>
<tr>
<td>Obesity - adult prevalence rate</td>
<td>35%</td>
</tr>
<tr>
<td>Diabetes – adult prevalence rate</td>
<td>20%</td>
</tr>
<tr>
<td>Chronic Kidney Disease Prevalence</td>
<td>9.3%</td>
</tr>
</tbody>
</table>
Saudi Arabia – Healthcare Segments

Saudi Healthcare System

Government sector (free)
- The Ministry of Health

Private sector (fee)
- Independent Government Bodies

- MOH 59.5%
- Other Govt. 19.3%
- Private 21.2%
- Other 21.2%
Saudi Arabia – Governmental Sector

- Referral hospitals (e.g. King Faisal Specialist Hospital and Research Center)
- Ministry of higher education hospitals (teaching hospitals)
- Royal commission for Jubail and Yanbu health services
- Security Forces Medical Services
- Army Forces Medical Services
- National guard health affairs
- ARAMCO hospitals
Challenges

- limited preexisting epidemiological data
- Wide geographic area
- Large Number of independent stakeholder
- Wide variability of connectivity of stakeholder
- Unclear ownership of the Disability Registry
Objective

To create a database in the form of a national registry, that would

- Provide vital information to the organizations catering to persons with disabilities
- Aid in the provision of necessary services for this population
- Allow information on persons with disabilities to be registered or to add information about persons with disabilities
The Role of the National Registry

- No Centralized Data Hub
- No National standards for Disability classification
- No Coordination between benefits provider

Employ national standards for disability classification
- Reliable data for better planning and equitable benefits distribution.
- Platform for coordination between various stakeholders.
Approach for Developing National Registry for People with Disability

The road map for developing the national registry

**Feasibility Study**
- Initial Assessment
- Selection of measurement tools
- Develop Technical measurement.
- Develop request for proposal.

**Call for Proposal**
- Call for proposal
- Review of technical and financial offers.
- Selection of vendors and awarding the project

**Implementation & Deployment**
- Development of the national registry
- Initial pilot and assessment.
- Role out of the final deployment of the national Registry.

**Monitoring & Improvement**
- Continuous monitoring.
- Improve current registry according to feedback and trends
Action Plan

- Creation of the team and drafting of the action plan
- Engagement of Stake holders
- Planning for collection of data and information
  - Questionnaire
  - Pilot testing
  - Final questionnaire
  - Standardization and Training
Action Plan (cont...)

- Preparation of the organizational structure of the administrative and technical
  - Examination and study of different managerial and technical structures, local and international
  - Identification of detailed components for specific models of the administrative and technical structure for national records for disability
  - Benefit from consultation services, national, regional and international
Action Plan (cont...)

- Establishment of equipment and facilities
  - Identification of technical requirements
  - Establishment of equipment and facilities
    - Data center
    - Main Office
- Training for staff
  - Questionnaire/data gathering
  - Technical
  - Administrative
Data Source for the Registry

- Interview
  - Questionnaire designed for the registry
  - Integration of the Washington Group Extended Set of Questions (WG ES-F)
- Online input of data
Overview of Questionnaire

- Demographic data
- Modified Washington Group Extended Set on Functioning (WG ES-F)/ICF Based Disability Component
- Clinical/ Medical Background
  - Current diseases (ICD-10 Classification)
  - Current Medication
  - Exercise
  - Smoking
  - Alcohol Intake
  - Substance abuse
  - Reproductive function
Overview of Questionnaire (Cont…)

- Disability Related Component
  - Financial Support
  - Other Types of Support
  - Respondent’s Perception of Current Support He/She Receives

- Interview details
  - Who conducted the interview
  - Date
  - Respondent
    - Person with disability himself/herself
    - Guardian/other representative
    - Both
Approach for Developing National Registry for People with Disability

The road map for developing the national registry

Feasibility Study
- Initial Assessment
- Selection of measurement tools
- Develop Technical measurement.
- Develop request for proposal.

Call for Proposal
- Call for proposal
- Review of technical and financial offers.
- Selection of vendors and awarding the project

Implementation & Deployment
- Development of the national registry
- Initial pilot and assessment.
- Role out of the final deployment of the national Registry.

Monitoring & Improvement
- Continuous monitoring.
- Improve current registry according to feedback and trends
Progress To date

<table>
<thead>
<tr>
<th>Activities/Milestones</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Situation and Stakeholders analysis</td>
<td>Completed</td>
</tr>
<tr>
<td>Review of Available disability measure tools</td>
<td>Completed</td>
</tr>
<tr>
<td>Translation and Validation of ICF to Arabic</td>
<td>Completed</td>
</tr>
<tr>
<td>Develop Data collection and Analysis Protocol</td>
<td>Completed</td>
</tr>
<tr>
<td>Develop Human Resources Plan</td>
<td>Completed</td>
</tr>
<tr>
<td>Develop budget estimate</td>
<td>Completed</td>
</tr>
<tr>
<td>Develop Request for Proposal</td>
<td>Completed</td>
</tr>
</tbody>
</table>
National Registry Process

**Registration & Validation**
- MOSA
- NDR
- Validate Eligibility
- Case Registration

**Benefit Request**
- Benefits Request
- Benefit Provider

**Reporting and Planning**
- Graphs and charts
Impact of The Registry

<table>
<thead>
<tr>
<th>Stake Holder</th>
<th>Beneficiaries</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOSA</td>
<td>Persons with Disability</td>
<td>• Universal Access to services</td>
</tr>
<tr>
<td>MOE</td>
<td></td>
<td>• Ease of access to benefits</td>
</tr>
<tr>
<td>MOH</td>
<td></td>
<td>• Awareness of the following: legislation, rights of persons with disabilities, and current programs for persons with disabilities</td>
</tr>
<tr>
<td>MOI</td>
<td>Decision Makers</td>
<td>• Reliable data for planning</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>• Internationally-comparable data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Platform for information dissemination</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Accurate reflection for the resources utilization</td>
</tr>
</tbody>
</table>
Some of The Key Analytics of the Registry

Who are the individuals with Disability?

- 350,000 People With Disability
- Age Distribution in 1000’s Individuals
- Distribution of Type of Disability Among Individuals with Disability

Employment and Income of Individuals with Disability

- Distribution of Unemployment By Gender
- Unemployment by Age Group
- Distribution of Income Among Working Disabled and Not Disabled individuals

Disability Services Utilization and Cost

- Total Cost of Services in Million SAR/Year
- Distribution of Services Utilized
- Total cost (in 1000’s) Allocation by the Type of Disability
THANK YOU