TARSS

Tool for Assessment of Rehabilitation Services and Systems
This project has been coordinated by the World Health Organization, Prevention of Blindness team.

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The WHO Action Plan for the Prevention of Avoidable Blindness and Visual Impairment 2014-2019 goal is “to reduce avoidable visual impairment as a global public health problem and secure access to rehabilitation services for the visually impaired”. The Plan calls for the empowerment of people with blindness and visual impairment so they “can participate fully in social, economic, political and cultural aspects of life”.

Using the WHO published global data on blindness and visual impairment there are 285 million vision impaired and 39 million blind. It is estimated that approximately 82 million people have low vision using the WHO definition of functional vision. Recent research indicated that many countries have no low vision services and in the majority of countries <10% of people with low vision access services. The TARSS has been designed to assist countries to undertake a situation analysis to obtain baseline data and an understanding of services available for people with low vision and blindness and the gaps needing to be addressed.

The objectives of the WHO Global Disability Action Plan 2014-2021: Better Health for all People with Disability are to:

- remove barriers and improve access to health services and programmes;
- strengthen and extend rehabilitation, habilitation, assistive technology, assistance and support services, and community-based rehabilitation;
- strengthen collection of relevant and internationally comparable data on disability and support research on disability and related services.

Significant barriers to the provision of habilitation, rehabilitation, assistive technology and assistance and support services exist, including the lack of prioritisation; the lack of policies and plans; high costs and non-existent or inadequate funding mechanisms; insufficient numbers of appropriately trained professionals, absence of facilities and equipment; and ineffective service models and lack of integration and decentralization of services (for example, rehabilitation and habilitation service provision within primary and secondary health care settings).

The TARSS is a tool that aims to provide the information needed to achieve the goals and objectives of the WHO Action Plan for the Prevention of Avoidable Blindness and Visual Impairment 2014-2019 and the WHO Global Disability Action Plan 2014-2021: Better Health for all People with Disability.
ESTIMATED SITUATION OF NUMBERS OF PEOPLE WITH LOW VISION

In order to gain data to understand the situation regarding the numbers of people with low vision and blindness and the need for services for the country, please provide the following information. In the case that prevalence studies are not available for the country, you can use the regional estimates of low vision and blindness prevalence and apply them to the country’s population. Often reliable data are not available on the prevalence and thus the numbers of children with low vision and blindness. The <5 mortality rate for the country can be used to establish estimates for children (Appendix 1).

| Country population: ............................................................ (Year: .....................) |
| Rural/Urban: ........../.......... |
| Male/Female: ........../.......... |
| Age groups: 0-15: ............ 16/49: ..................... 50+: ..................... |

Please state the source of the data that was used to provide these numbers:

__________________________________________________________________________________

Children:
Estimated number of children with low vision: ..............................
Estimated number of children who are blind: ..............................

Adults:
Estimated prevalence of low vision: ..............................
Estimated number of people with low vision: ..............................
Estimated prevalence of blindness: ..............................
Estimated number of people who are blind ..............................

Estimated percentage of people with low vision accessing low vision and rehabilitation services care: ..............................

Estimated national coverage of low vision services for adults: Urban ................. Rural ..............................
Estimated national coverage of low vision services for children: Urban ................. Rural ..............................

From the data for each of adults and children, the WHO functional definition of low vision should be used to estimate the number of people likely to need low vision services. It states: “a person who has impairment of visual functioning even after treatment and/or standard refractive correction, and has a visual acuity of less than 6/18 to light perception, or a visual field less than 10 degrees from the point of fixation, but who uses, or is potentially able to use, vision for the planning and/or execution of a task”.
SECTION 2: LEADERSHIP AND GOVERNANCE

1. National Plan
   (a) Is there a national prevention of vision loss or blindness plan for your country? Yes No
      If yes, does it contain a plan for services for people with low vision? Yes No
   (b) Is there a national plan by a welfare department of the government for rehabilitation and benefits for people with disability? Yes No
      If yes, does it include provision for people with low vision?
   (c) Is there a national plan for early intervention and education of children with a disability? Yes No
      If yes, does it contain a plan for inclusive education services for children with low vision?

   Please add comments regarding the content and implementation of the national plans.

2. Is there a national policy on inclusion of people with disability to access services for health care? Yes No
   If yes, does it specifically include people with vision problems? Yes No

Guidelines for Provision of Services

1. Are there national guidelines for the delivery of low vision services? Yes No
   If there are guidelines please provide the title of the guidelines and a copy of them

2. Who is the target audience for the guidelines?

3. Are the guidelines evidence-based or consensus-based or a mixture of both?
   Evidence-based   Consensus-based   Mixture of both

4. If consensus-based, who were the stakeholders involved in their development?

5. What information is included in the guidelines?
   (a) Eligibility of children and adults for low vision services ____________________________
   (b) Low vision devices that should be prescribed ____________________________
   (c) Services provided at tertiary, secondary and community-based levels? __________________

6. Are the guidelines being used? Most services Some services Few or no services

7. How is the intended audience for the guidelines made aware of them?
   Through professional organisations Website Other __________________
Policy on Disability

Has the national government signed the United Nations Convention on the Rights of People with Disability (UNCRPD)?

□ Yes □ No

Has the national government agreed to the principles contained in the UNCRPD? (Tick all that apply)

□ Inclusive participation  □ Non-discrimination  □ Equality of opportunity  □ Accessibility  □ Equality between men and women  □ Rights of the child with disability

Has the national government enacted legislation and administrative measures to implement the rights contained in the UNCRPD?

□ Yes □ No

Has the national government conducted campaigns to encourage awareness of the rights of persons with disability?

□ Yes □ No

Has the national government implemented measures to provide access to information and participation of persons with disability?

□ Yes □ No

Are there procedures in place to assist people with low vision or blindness in times of disasters or emergencies?

□ Yes □ No
**SECTION 3: SERVICE DELIVERY**

Please complete this page for the country. If services vary by state or province, please complete this page for each state or province or groups of states or provinces that have similar service provision.

Are there low vision clinics providing services for adults with low vision?  □ Yes □ No

How many clinics provide low vision services for adults: Urban ___ Rural ___

Are there low vision clinics providing services for children with low vision?  □ Yes □ No

How many clinics provide low vision services for children: Urban ___ Rural ___

Are there rehabilitation services for people with low vision?  □ Yes □ No

How many centres provide low vision rehabilitation services: Urban ___ Rural ___

Are there early intervention services for children with low vision?  □ Yes □ No

Are they provided in urban areas: □ Yes □ No and rural areas □ Yes □ No

Are there inclusive education services in schools for children with low vision?  □ Yes □ No

Are they provided in urban areas: □ Yes □ No and rural areas □ Yes □ No

Which agencies provide low vision services and what is the estimated proportion that each provides?

<table>
<thead>
<tr>
<th>Yes or No</th>
<th>0-25%</th>
<th>25-50%</th>
<th>51-75%</th>
<th>&gt;75%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Clinical</strong></td>
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</tr>
<tr>
<td>Government</td>
<td></td>
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<tr>
<td>Not for profit</td>
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<tr>
<td>NGOs</td>
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<td>Private</td>
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<tr>
<td><strong>Rehabilitation</strong></td>
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<tr>
<td><strong>Home based:</strong></td>
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<tr>
<td>Government</td>
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<td>Not for profit</td>
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<td>NGOs</td>
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<tr>
<td>Private</td>
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<tr>
<td><strong>Institution based:</strong></td>
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<tr>
<td>Government</td>
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<td>Not for profit</td>
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<td>NGOs</td>
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<tr>
<td>Private</td>
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</tbody>
</table>
Are low vision clinics located:  □ Within hospitals  
□ Rehabilitation services  
□ Private providers  
□ Education institutions or schools

Are there low vision clinical services for adults and children with cortical vision impairment and sensory or physical disabilities? □ Yes □ No

Are there rehabilitation and training centres for adults and children with cortical vision impairment and sensory or physical disabilities? □ Yes □ No

What proportion of the population with low vision accesses low vision services (circle what applies)?
0-10%  11-20%  21-50%  >50%

What is the coverage of the population with low vision services in urban and rural areas (circle what apply)?
Urban: 0-10%  11-20%  21-50%  >50%
Rural: 0-10%  11-20%  21-50%  >50%

Of the people who use low vision services, what are the proportions of males and females?
Male _____%  Female _____%

Are there any specific eligibility criteria that are used to provide guidelines on the need for services?
Visual acuity ___________  Visual fields ___________  Other ___________

Are there screening or other methods to identify and refer children who need low vision services?
□ Yes  □ No  Please describe the program __________________________________________

Are there screening or other methods to identify and refer adults who need low vision services?
□ Yes  □ No  Please describe the program __________________________________________
How are people usually referred for services? (Tick all that apply)
- Ophthalmologist
- Optometrist
- Nurse
- Rehabilitation staff

Other ___________________________________________________________

Where are people referred from for low vision services?
- Aged care
- Community health services
- Community rehabilitation services
- Education in mainstream schools
- Special schools
- Other ____________________

Are there organisations for people with disability?  □ Yes  □ No

List organisations for people with disability that are specific to blindness and low vision.
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### SECTION 3: HEALTH WORKFORCE

Which health and rehabilitation professionals provide services to people with low vision?

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Number full-time</th>
<th>Number part-time</th>
<th>Average number of patients/clients seen per month</th>
<th>Training courses in low vision available (circle what apply)</th>
<th>If yes, duration of course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ophthalmologist</td>
<td></td>
<td></td>
<td></td>
<td>Yes  No</td>
<td></td>
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<tr>
<td>Optometrist</td>
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<td>Yes  No</td>
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<tr>
<td>Ophthalmic nurse</td>
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<td>Yes  No</td>
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<tr>
<td>Orthoptist</td>
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<td>Yes  No</td>
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<tr>
<td>Ophthalmic medical assistant</td>
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<td>Yes  No</td>
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<td>Refractionist</td>
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<td>Yes  No</td>
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<tr>
<td>Low vision technician</td>
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<td>Yes  No</td>
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<tr>
<td>Allied health professional</td>
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<td>Yes  No</td>
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<tr>
<td>Community-based rehabilitation worker</td>
<td></td>
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<td>Yes  No</td>
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<tr>
<td>Specialist teachers</td>
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<td>Yes  No</td>
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<tr>
<td>Orientation and mobility instructors</td>
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<td>Yes  No</td>
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<tr>
<td>Rehabilitation specialists</td>
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<td>Yes  No</td>
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<tr>
<td>Other (list)</td>
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<td>Yes  No</td>
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</table>

Please add additional notes about other providers in the workforce and the training resources available

__________________________________________________________________________________

__________________________________________________________________________________
SECTION 4: TECHNOLOGY AND ASSISTIVE DEVICES

What equipment is usually available for use in low vision clinics?

- **LogMAR visual acuity charts**:
  - distance: □ Yes □ No
  - near: □ Yes □ No

- **Children’s LogMAR visual acuity charts**:
  - distance: □ Yes □ No
  - near: □ Yes □ No

- **Contrast sensitivity tests**: □ Yes □ No

- **Colour vision test**: □ Yes □ No

- **Ophthalmoscope**: □ Yes □ No

- **Visual field perimeter**: □ Yes □ No

- **Retinoscope**: □ Yes □ No

- **Trial lens set and frames (children and adults)**: □ Yes □ No

- **Keratometer**: □ Yes □ No

Which low vision devices and equipment are generally available in low vision services and who provides the funding for people who have these prescribed or recommended *(fill as appropriate)*?

<table>
<thead>
<tr>
<th>Devices</th>
<th>Full Range or limited</th>
<th>Range of cost</th>
<th>Government</th>
<th>NGO</th>
<th>Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low-medium power magnifiers</td>
<td></td>
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<tr>
<td>High power magnifiers</td>
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<tr>
<td>Spectacles</td>
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<tr>
<td>Telescopes</td>
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<tr>
<td>Coloured UV filter glasses/ goggles</td>
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<tr>
<td>Electronic devices for magnification</td>
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<tr>
<td>Digital devices</td>
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<tr>
<td>Non-optical equipment</td>
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<tr>
<td>Mobility devices</td>
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<tr>
<td>Audio library</td>
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<tr>
<td>List other devices:</td>
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</tbody>
</table>
SECTION 5: INFORMATION MANAGEMENT SYSTEMS

Is there a method to collect data on the numbers of people with low vision or blindness?

- Census data
- Only people registered for government benefits
- Survey data
- Organisations’ reports
- Other
- No data

If collected, are the data used to plan services for people with low vision and blindness?  □ Yes □ No

Is there a method to collect data on the numbers of people with low vision or blindness who access rehabilitation services?

- Service providers required to report data  □ No methods

Do service providers use electronic methods to obtain patient/client records (circle what applies)?

- All
- Most
- Few
- None

What information is usually collected by service providers on people using low vision services?

(Tick all that apply)

- Age
- Gender
- Place of residence
- Cause of low vision
- Visual acuity before assessment/rehabilitation
- Visual acuity after assessment/rehabilitation
- Devices and equipment taken by the person
- Rehabilitation or training given
- Outcome reported by person or from an outcome measure
SECTION 6: AWARENESS AND HEALTH PROMOTION

Are there awareness campaigns such as on World Sight Day about services for people with low vision?

☐ Yes   ☐ No

Do organisations that provide services for people with low vision advertise the services?

(Tick all that apply)

☐ On websites
☐ Advertisements
☐ Notices in eye care centres or hospitals
☐ Information to ophthalmologists
☐ Information to optometrists
☐ Aged care services
☐ Teachers
☐ Other

Do consumer or peer support groups such as for people with low vision or disability create awareness about their organisations?

☐ Yes   ☐ No

Do organisations such as those for people with macular degeneration, glaucoma or diabetes create awareness about the benefits of services for people with low vision?

☐ Yes   ☐ No

Are awareness campaigns and information about low vision services provided in the languages used in the country?

☐ Yes   ☐ No
### SECTION 7: FINANCING

How are services, equipment and devices for people with low vision funded? If the funding is not on a national basis, please complete this table by state or province. States or provinces can be grouped if the sources of funding are similar in each.

<table>
<thead>
<tr>
<th>Services and devices</th>
<th>% funded by government</th>
<th>% funded by private insurance</th>
<th>% funded by patient (put-of-pocket)</th>
<th>% funded by NGO</th>
<th>% funded by others (please describe)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical services</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Rehabilitation and training</td>
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<tr>
<td>Low vision devices</td>
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<td></td>
<td></td>
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<tr>
<td>Adaptive equipment</td>
<td></td>
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<td></td>
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<tr>
<td>Special equipment for students</td>
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<tr>
<td>Home-based services</td>
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<tr>
<td>Other (please describe)</td>
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</tbody>
</table>

Are people with low vision or blindness eligible for welfare benefits such as pensions and travel concessions?  □ Yes  □ No

Please list benefits or concessions that people can obtain

What is the vision criterion that is used for eligibility for welfare benefits (*circle what apply*)?
- <6/60
- <3/60
- Other ____________________________

What is the visual field criterion for eligibility for welfare benefits (*circle what apply*)?
- <10 degrees
- Other ____________________________

Are there any groups of people with vision disability who are not eligible for benefits?
- □ Yes  □ No  If yes, please describe those who are ineligible:

_______________________________________________________________
References:


The University of Sydney – WHO Collaborating Centre in Health Workforce Development in Rehabilitation and Long Term Care. Survey on Health Care and Health Facilities Including People with Disabilities and Rehabilitation Services, CBR and Assistive Technology. Draft 2, December 2013.
APPENDIX 1

Using the under 5 years mortality rate has been suggested by WHO as a means to estimate the number of children (0-15 years) who are blind (visual acuity <3/60). The number with low vision is in the range of 2 to 3 times the number who are blind. It is suggested that both numbers are used to obtain an upper and lower limits of the numbers with low vision. The table shows the rate of blindness per thousand population for each level of under 5 mortality rate (per thousand live births). The under mortality rates for each country can be obtained from the latest World Health Statistics Report on the WHO website. The 2014 report can be found at http://apps.who.int/iris/bitstream/10665/112738/1/9789240692671_eng.pdf?ua=1

<table>
<thead>
<tr>
<th>U5MR</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-19</td>
<td>0.3 per 1,000</td>
</tr>
<tr>
<td>20-39</td>
<td>0.4 per 1,000</td>
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<tr>
<td>40-59</td>
<td>0.5 per 1,000</td>
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<tr>
<td>60-79</td>
<td>0.6 per 1,000</td>
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<tr>
<td>80-99</td>
<td>0.7 per 1,000</td>
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<tr>
<td>100-119</td>
<td>0.8 per 1,000</td>
</tr>
<tr>
<td>120-139</td>
<td>0.9 per 1,000</td>
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<tr>
<td>140-159</td>
<td>1.0 per 1,000</td>
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<td>160-179</td>
<td>1.1 per 1,000</td>
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<tr>
<td>180-199</td>
<td>1.2 per 1,000</td>
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</table>