Community Based Diabetic Retinopathy Prevention and Control Program in Shanghai

Shanghai Eye Disease Prevention and Treatment Center
Oct. 13, 2015, Beijing
Shanghai Eye Disease Prevention and Treatment Center (SEDPTC)

- Founded in 1942
- Municipal eye disease prevention and treatment institute
- Under the direct leadership of Shanghai municipal health and Family Planning Commission, the disease control department and Medical Affairs department
- Responsible for the planning and organization of the city's eye disease prevention and control program
1. System of eye disease control and prevention in Shanghai

- Shanghai municipal health and Family Planning Commission
  - Public Health department
    - CDC
  - SEDPTC
    - District level Eye disease Center
  - District Bureau of Health
    - District level hospital (34)
    - District level hospital (90)
  - Medical Affairs department
    - City level hospital (34)

- Community Health Center (244)

- Administration
- Bussiness Mentoring
- Medical Affair
Management of diabetic patients with chronic disease management and eye disease management

- City CDC
- District CDC
- Community Health Center
- SEDPTC
- District EDPTC (17)
- Fundus photo reading center
- Hospital

Management of diabetic patients
Management of diabetic retinopathy patients
2. The construction of comprehensive service system for the prevention and treatment of eye diseases

Start from Feb. 2014

- From the diabetic retinopathy prevention program

<table>
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<tr>
<th>Community</th>
<th>Hospital</th>
<th>Mode</th>
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<tr>
<td>Changzheng, Putuo</td>
<td>Liqun Hospital</td>
<td>Screening camp</td>
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<tr>
<td>Jiangchuan, Minhang</td>
<td>5th People’s Hospital</td>
<td>Integrated into physical examination</td>
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Service Flow:

图 远程筛查技术与信息传输示意图
Community Health Center

(1) Organizing diabetic patients screening for DR, establishing the eye health archive;

(2) Referring the patients with DR to the cooperative hospital, according to the remote diagnosing from the ophthalmologists;

(3) Following up the patients and promoting eye health education
Cooperative Hospital

(1) Remote fudus photo reading center, making diagnosis and providing advice;

(2) Receiving the patients from the community, treating the DR patients with laser or surgery, if PDR or with other difficulty complication, referring them to the upper level hospital
Remote screening and IT technology

Community base screening

Remote diagnosis

Archive for DM patients

Feed back with diagnosis from ophthalmologists
IT technology improving the screening flow

DM patients information
Pro. Jialiang Zhao
Results

3700 DM patients

Rate of need referring 29.4%

Rate of referring 68.57%

Rate need treatment 15.28%
Platform for DM patients data in Shanghai
DM patient management using huge data

Health Cloud

- Patients
- SEDPTC
- Municipal Health Bureau

Health archive

Equipment

Screening, follow up

Community

Medical Record

Remote

2nd level

Remote

3rd level

Cooperation

CDC

Equipment

Cooperation
Database:

DM database

Eye Disease database
DM database

History
Clinical symptom
BG: FBG, OGTT, 2hPBG
HbA1c
Blood lipid: Total cholesterol (mmol/L)
HDL (mmol/L)
LDL (mmol/L)
Triglyceride (mmol/L)
Renal Function: Urinary albumin / urine creatinine (mg/mmol)
24 hour urine protein (mg/24h)
General situation: Weight (kg), Height (cm), waistline (cm), Hipline (cm), BMI
Medication:
Sports:
Diet:
• **Eye disease database:**

   - **Eye disease history:**
   - **Eye surgery history:**
   - **VA:** UCVA, PVA, BCVA
   - **Refraction:**
   - **Fundus:** DR grade, DME others
   - **Advice:** follow up
   - **Treatment:** medication / surgery
Problems

• Training:
  community, GPs, lay screeners
  ophthalmologist (fundus photo reading and diagnosis)

• Instrument and equipment:
  community fundus camera/autorefraction

• Technology and software:
  with International recognition
谢谢大家！