



Non-profit & self-financing model of Diabetes complications screening & follow up care in the community of Tai Po

*Symposium on Community Engagement III
“Creating Synergy for Community Health”*

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www.ucn.org.hk



What is the nature of “United Christian Nethersole Community Health Service”?

- **UCN** for short
- *Non-governmental organisation* (NGO) under the United Christian Medical Service
- 1972: established in Kwun Tong
- 1997: merged with Nethersole CHS in Tai Po
- Sister organisation to United Christian Hospital, Nethersole group of hospitals





Our organisation

- Core function essentially **primary care medical and health**
 - Primary medical clinics focus on Family medicine, Community medicine, Occupational medicine
 - Other services include dentist, dietitian, physiotherapy, Chinese medicine and outreach
- 




Diabetic Mellitus Complication Screening Service (DMCS) 糖尿病併發症檢查

- Started since 2003 in Tai Po
- Generous donation from Sir Robert Hotung Foundation for retinal camera





DMCS 糖尿病併發症檢查

- Purpose is to make essential preventive checkup service for diabetics easily **accessible** and **affordable** in the community
 - Prevent blindness, kidney disease, foot disease – common in diabetes
 - **Relieve burden from the public hospital sector** by giving a low-cost alternative
 - Follow up care arranged
- 





Logistics of the screening service

- Run by trained Health Maintenance Officers (HMO) and Registered Nurse (RN)
- Doctor in supporting role
- Price ranges from \$200 for retinal photo only and \$720 for full package
- Fees charges on *cost recovery basis*





Logistics of the screening service

- Encourage uptake of essential preventive checkup
- Referral from any health professional or concerned persons
- Self-referral welcome
- **Full explanation of results & provide follow-up arrangement** – to private or public as per client request



DMCS package components

- Questionnaire for basic health information related to DM
- Non-mydriatic retinal photo
- Microalbuminuria screening



DMCS package components

- Diabetic foot complication screening
- Blood tests for HbA1c, fasting glucose, lipid profile, liver function, renal function and electrolytes





Service options

- DMCS packages ranges from \$200 to \$720
- Dietitian counseling \$260 per hour (\$200 for elderly)
- Nurse Diabetes education
- Diabetes patient support group - free
- Chronic diseases clinic for medical treatment available



糖尿病併發症檢查項目 Diabetic Complication Screening Package

	DM-01	DM-02	DM-03	DM-04	DM-05	Retinal Photo 眼底相
BP/PP 血壓/脈搏	X	X	X	X	X	
BMI 體重指數	X	X	X	X	X	
FAT % 脂肪	X	X	X	X	X	
WHR 腰圍臀圍比例	X	X	X	X	X	
VA 視力	X	X	X	X	X	X
Tonometry 眼壓檢查	X	X	X		X	
Retinal Photo 眼底相	X	X	X		X	X
Foot assessment 足部評估	X	X	X	X	X	
FBS 空腹血糖	X	X		X		
HbA1C 糖化血紅素	X	X		X	X	
TC 總膽固醇	X	X		X		
LDL 低密度膽固醇	X	X		X		
HDL 高密度膽固醇	X	X		X		
TC 三酸甘油脂	X	X		X		
Creatinine 肌酸酐	X	X		X		
ALT 谷丙轉氨酶	X	X		X		
K ⁺ / Na ⁺ 鉀 / 鈉	X			X		
Microalbuminuria 尿微量蛋白檢驗	X	X		X	X	
History taking 個人及家族病史	X	X	X	X	X	X
*Report giving 講解報告	X	X	X	X	X	X

* 報告由註冊西醫審閱簽署

Work flow for DMCS reporting

■ Doctors

- reading the retinal photos and relevant investigation results
- writing comments and recommendations on the reports




■ Health Maintenance Officers (HMO) or Registered Nurse (RN)

- explain the DMCS reports to our clients





Work flow for DMCS reporting

- For those cases referred by our own clinic doctors
 - the reports will be sent back to our doctors for explanation during follow-up
 - For those cases referred by external doctors
 - reports sent back to that doctor for explanation & follow-up
- 



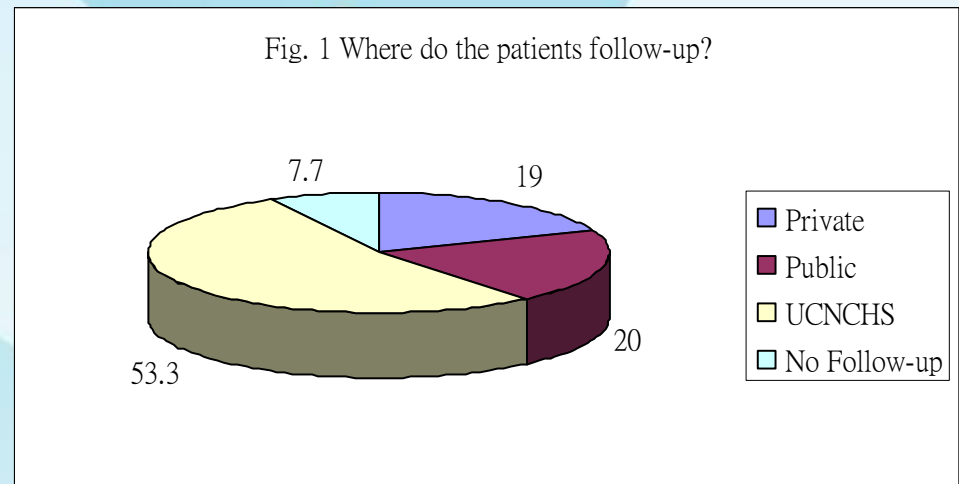


Staff training & quality assurance

- Retinal photo reading by doctors x 2
- Doctors trained by Ophthalmologist
- Photo interpretation backup by Ophthalmologist
- Regular refresher training
- Doctor trains HMO's and RN's



Statistics



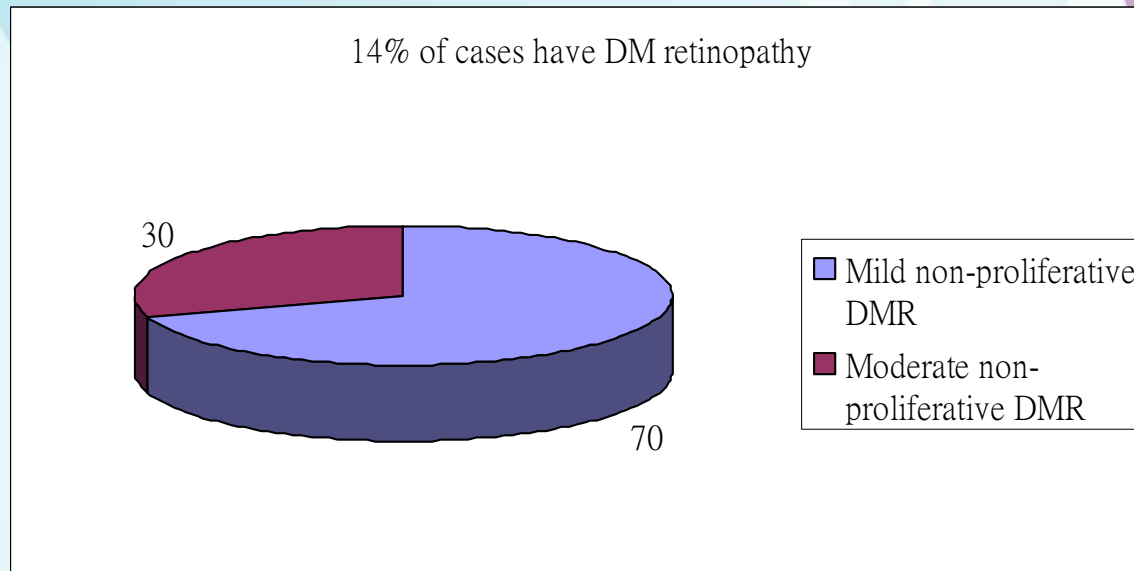
- On average, about 20 cases per month
- Referral source include self referral, referrals by our UCN doctors, GOPC, private doctors (very few)
- Follow up of these DM cases include private, public, our UCN doctors, or no follow-up (Fig. 1)



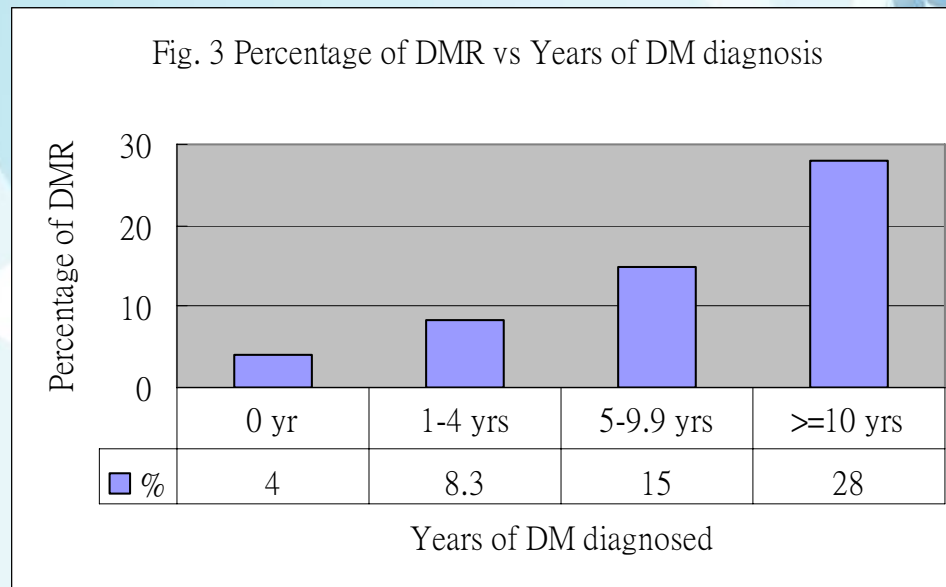
社區糖尿病併發症普查計劃

Dr. Ruby K.C. Lai, Dr. Angus Y.T. Hung (KFCHC)

- A study on the cases from 2004 to 2006
- There are 400 cases
- **14% have DM retinopathy (DMR)**




- Percentage of DMR increases in proportion to the years of DM being diagnosed
- Even at **initial diagnosis 4% have DMR**
- 28% have DMR ≥ 10 years of DM diagnosis





Service expansion to Diabetes management centre

Until end of 2007

- We have a total of **495** cases of DMCS done in Tai Po Clinic already
 - Started retinal photo alone service by referral from HA
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Service expansion to Kwun Tong

Since March 2008

- DMCS service also in Kwun Tong : Jockey Club Wo Lok Clinic
- with donation of equipment from Operation Santa Claus



Referral is simple!

- Anybody can refer
- Welcome private doctor referrals
- HA clinics can also refer
- Self-referral welcome
- Make appointment by phone
- Health care professionals may use referral form – **download from website or use your own**

轉介日期：_____

轉介西醫：_____

轉介診所地址及電話：_____

病人聯絡電話：_____

病者姓名：_____

年齡/性別：_____

糖尿病診斷日期：_____

轉介西醫簽署：_____

請圈出適當的答案

以往曾否於廣福社區健康中心拍攝眼底相 有/沒有
現時治療： 飲食控制/口服藥物/胰島素注射/

口服藥物+胰島素注射

過往病歷：

糖尿病視網膜病變 有/沒有

冠心病 有/沒有

中風 有/沒有

腎病 有/沒有

高血壓 有/沒有

高血脂 有/沒有

報告請寄回轉介西醫 是/否

轉介 (請✓選擇) 視網膜檢查

糖尿病併發症檢查, 項目

請將填妥表格傳真至廣福/賽馬會和樂社區健康中心為病人預約檢查日期。傳真後請致電各所屬中心確保接收無誤。


廣福社區健康中心
電話：2638 - 3846
傳真：2638 - 0142

賽馬會和樂社區健康中心
電話：2344 - 3444
傳真：2342 - 5023





Conclusion (1)

- Diabetes cases increasing in HK
 - Availability of low-cost preventive services at **primary care** level can reduce burden of disease
 - **Self-finance model** possible with sponsorship for capital equipment
 - Non-profit nature of UCN makes preventive service at primary care level in the community **affordable & accessible**
- 





Conclusion (2)

- Screening should be paired with follow-up care arrangement
- Referrals from all health professionals, concerned persons and self-referral welcome & facilitates uptake
- Welcome HA to refer their cases to the service





基督教聯合那打素社康服務

UNITED CHRISTIAN NETHERSOLE COMMUNITY HEALTH SERVICE

www.ucn.org.hk

Thank you!

DMCS 糖尿病併發症檢查

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