**Workshop 4: Care Of Older People With Diabetes In The Community**

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**Overview**

- Community Care Team / Services in:  
  - KTPH  
  - Tsao Foundation
- Case Study 1, 2, 3 & 4
- Useful Resources in Community
- Challenges

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**Community Care- home visit**

Strait Times  
(2 Nov 15)

**Patients gain from new focus on home**

*At Khoo Teck Puat Hospital’s Ageing-in-Place Programme*, help recently discharged patients with complex conditions transition smoothly from hospital to home through comprehensive assessment and complication prevention by a team of doctors, nurses and therapists.

"Frequent fliers", patients who are unnecessarily readmitted to acute hospitals multiple times, utilise disproportionately more scarce resources, and are costly.
Inpatient Ward / Specialty Outpatient Clinic

Discharge Home (supported by AIP-CCT)

Home Visit by Doctor
- Review medical conditions and optimise medical care

Home Visit by Nurse
- Conduct holistic care assessment
- Perform nursing care & monitoring such as BGM & BPM
- Tailored health education & caregiver training

Home Visit by Occupational Therapist
- Conduct functional assessment & optimise treatment plan
- Conduct home physiotherapy and prescribe mobility aid

Home Visit by Physiotherapist
- Conduct functional assessment & optimise treatment plan
- Conduct home physiotherapy and prescribe mobility aid

Home Visit by Speech Therapist
- Address communication difficulties
- Assess swallowing function & provide intervention

How the home visit team help our older people with diabetes at home?

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Why home visit important ?

Why care of elder people with diabetes in community is important ?

Collaborative with diabetes team & CCT

Updated 2 Dec 2015

What are the benefits received from home care visit ?

- Save cost such as ambulance, family taking leave from work
- Recommended realistic solutions
- Delivers CGT based on home modification & not ward environment
- Practical approach based on real situation at home
- Identify potential problems with patient adaptation back to home
- Evaluate real home condition
- Times to build rapport with not only patient but family
Community Care Team in Tsao Foundation

Approach to the Cases

Mdm XX: Medical history
• Has many co-morbidities resulting in 3-4x hospitalization per year
• Diabetes on insulin
• Hypertension/ hyperlipidemia
• Stage 3 CKD with proteinuria
• Child’s B liver cirrhosis
  – Cx: portal hypertension/ ascites
• Bilateral OA knees
• Anemia
  – Hb 7 → 9.9 → 9.2 : Refused investigation

Case Study 1

What happened ...
• Hospitalized for LRTI
• F/u in post-discharge
  – Functional decline
    • Unable to self transfer
  – Changes in medication
    • Increase in insulin leading to hypo (mixtard 30/70: 36 units OM/ 4 units ON → 40units OM/ 12 units ON)
    – Change in helper
Who is this person really?

78 / widow / retired hawker
Mainly Hokkien speaking with
simple Malay & Chinese

ADL and IADL assisted. Mainly
homebound. Goes out on w/c

Dual continent

AMT 10/10

Owns a 2-room flat.
Stays with helper.

Living on savings.
Some allowance from her
children.

Has 4 children – visit her
1x/week. Phonecall on regular
basis.

The approach

Assessment → Issues Identified → Plan/ Intervention → Goal of Care

Active:

• Hypoglycemia
• Functional decline
• Low mood
• Financial constraint

At risk:

• Fall
• Social isolation
• Malnutrition

The approach

Assessment → Issues Identified → Plan/ Intervention → Goal of Care

Diabetes
• Cutting down of insulin by 12 units
• Troubleshooting for possible errors – diet/ timing/ meds etc
• Closer TCU duration

Functional decline
• Refer rehab (reject)
• Home exercise
• Home visit (EASE/ ADL coping)
• Hospital bed

Fall risk
• Ask every clinical encounter
• Same as functional decline

Risk for social isolation
• Same as low mood
• Under vulnerable adult lookout (HMC)

Risk for malnutrition
• Diet history & monitoring
• Weight (difficult – ascites)
• Dietician (reject)

Financial constraint
• CHAS/ PGDAS/ FDS levy

Communication with stakeholders, caregiver training & health education

Communication with stakeholders, caregiver training & health education

Whose goal?

HbA1c target

Functional – potential vs
maintenance

Others

Older adults has unique challenges in home
environment, a person-centered approach is
imperative to achieve good care.
Case Study 2

Mdm Lee YL
73yrs old / Chi / F
ADL independent
Community ambulant with Q/S.
Non-smoker/non-alcoholic

* Referred to CCT after recent discharge

Past Medical History
1. Diabetes
2. Hypertension
3. Hyperlipidemia
4. Subclinical hyperthyroidism
5. Vit D deficiency
6. Osteoarthritis knee
7. Recurrent fall
8. Major depressive disorder with cognitive impairment

Social History
Security supervisor
Recently had fall & 
# Leg

CFS 5

1. Diabetes
2. Geriatric related issues
3. Functional
4. Nutritional
5. Psychosocial

Goal of Care

The approach

Assessment
Issues Identified
Plan/ Intervention

Clinical History Table

1. Drug Med - People living on drugs, unless medically otherwise
2. History Med - Briefly review the medical history of the patient, focusing on recent and past medical conditions
3. None - None
4. Dementia - Dementia
5. Depressive - Depression
6. CFS - CFS

Past Medical History
1. Diabetes
2. Hypertension
3. Hyperlipidemia
4. Subclinical hyperthyroidism
5. Vit D deficiency
6. Osteoarthritis knee
7. Recurrent fall
8. Major depressive disorder with cognitive impairment
Current Medication List

<table>
<thead>
<tr>
<th>No.</th>
<th>No.</th>
<th>Drug name</th>
<th>Dosage &amp; Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Insulin GLARGINE – LANTUS</td>
<td>20 units – OM, 30 units ON</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Insulin ASPART – NovoRAPID</td>
<td>14 units(s) – BD</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Insulin ASPART – NovoRAPID</td>
<td>14 units(s) – BD</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Insulin ASPART – NovoRAPID</td>
<td>14 units(s) – BD</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Aspirin</td>
<td>100 mg – OM</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Simvastatin</td>
<td>20 mg – ON</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Senna</td>
<td>15 mg – ON</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Lactulose</td>
<td>10 mL – BD</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>OMEPRAZOLE</td>
<td>40 mg – PO – OM</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>ferrous FUMARATE</td>
<td>200 mg – BD</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>ETOICOXIB</td>
<td>60 mg – OM PRN</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>GABAPENTIN</td>
<td>300 mg – ON</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>ketoprofen</td>
<td>1 patch – TransDermal – BD – PRN for knee</td>
<td></td>
</tr>
</tbody>
</table>

The approach

Assessment → Issues Identified → Plan of Intervention → Goal of Care

- Diabetes related issues
- Functional issues
- Psychosocial issues

Diabetes Related Issues

Insulin Aspart was increased from 10u BD to 14u BD.

Based on HBGM done at home

Storage of medications

Pills storage

Poorly controlled DM  
Jan’16 HbA1C 12.1%

Does regular HBGM using expired glucometer strips
Functional Related Issues

Frequent fall
Fallen twice at entrance of toilet due to bilateral OA knee and weakness

Fall hazard
Bedroom entrance

Fall hazard
Cluttered house

Abrasion on knee sustained from fall
Poorly controlled diabetes
Psychosocial Issues

Psychosocial issues identified

- Financial Constraint
- Risk of Social Isolation

The approach

Assessment → Issues Identified → Plan/Intervention → Goal of Care

Communication with stakeholders, caregiver training & health education

Manage the Diabetes

- Get new strips
- Educate on SMBG regime
- Adjusted the insulin
- Proper pill box

Ease Program

2 way toilet entrance

Bedroom entrance
Kitchen entrance
Social Service

1. 50% KTPH Medifund assistance (NSF)
2. 30% subsidy for non-residential ILTC service.
   ➢ Mdm Lee survive on monthly CPF payout
3. Meals on wheels
4. Housekeeping
5. Personal hygiene

Social Service (continue)

6. Assistance in buying groceries
   ➢ Mdm Lee has fall risk.
   ➢ Dg recently went for knee surgery and is currently recuperating. Ambulates with clutches and wheelchair in the community
7. HDB Ease Program
   ➢ Fallen twice at entrance of toilet due to lower limb weakness
8. Day Rehab Centre/ Befriender service
   ➢ Mdm Lee will be alone during the day when daughter goes to work.

The approach

Assessment ➔ Issues Identified ➔ Plan/ Intervention ➔ Goal of Care

What goal?

Diabetes target
Optimise Chronic Disease
Functional – potential vs maintenance
Others

Home care allows “real-time” setting.

Practical approaches to individual lifestyles, practices, home environment are required.

Not change but modified from existing situation.

Case Study 3

The approach

Assessment ➔ Issues Identified ➔ Plan/ Intervention ➔ Goal of Care

• Diabetes
• Geriatric related issues
• Functional
• Nutritional
• Psychosocial
Ms S

64 yo / Malay/ Lady

Past Medical Hx:
- T2 DM cx by neuropathy & retinopathy
- HTN
- HLD
- Cryptogenic liver cirrhosis
- PVD cx by B/L BKA (2006 & 2009)
- Primary Hirsutism
- Mechanical fall complicated by Left closed subtrochanteric displaced # (Sept 15)

Social Hx:
- Not married
- Lodge at sister & nephew’s 4 rooms HDB.
  Has strained relationship with sister
- Smoker

Functional State:
- Wheelchair home bound
- Otherwise, ADLs independent

Diabetes Outpatient Clinic (July15- Feb 2016)
- Weight : on wheelchair
- BP : 100/65 to 140/65
- HbA1c : 9.2 → 9.9 → 10.4%
- Random BG: 17.0 to 19.0 mmol/L
- SMBG : not doing

Current medications :
* Insulin Novomix 30/70 flexpen 35u pre-BF, 12u pre-lunch, 30u pre-dinner (increased since Sep 15)
* Metformin 500mg bd (added in Jan 16)

Diabetes related issues
Nutritional issues

Indication of home visit...

Referred to home visit team in Jan 16

Reasons:
- Having non-specific giddiness on & off
- Unable to do SMBG due to poor hand dexterity
- Self Blood Glucose Monitoring (SMBG)

The approach

Assessment → Issues Identified → Plan/ Intervention → Goal of Care

High BG pre meal >15 & post meal >18 mmol/l.
Daily bottles sugary drinks & expensive fruit ‘syrup’
Not taking metformin as it causing her more giddy
Giddiness symptoms when sugar levels are high
Still smoking 1 pack/day

Adjusted insulin
Changed to non-sugary drinks, reduce the fruit syrup
Stopped
Getting patient to understand likely due to hyperglycemia
Reduced to 1 pack /3-4 days
Interim visit in 1 month...

- HbA1c: 9.2 → 9.9 → 10.4
  → (started home visit) 9.7%
- SMBG during home visit:
  - pre-meal < 15 mmol/L
  - post-meal < 18 mmol/L

Multidisciplinary approach allows continuity of care, & give an appropriate assessment / intervention of patient’s needs at own home setting.

The approach

Assessment → Issues Identified → Plan/Intervention → Goal of Care

Whose goal?

- Diabetes target
- Functional – potential vs maintenance

Case Study 4
Mdm Chang

- **Mdm Chang/80 yo / Chinese/ Lady**
- **Past Medical Hx:**
  - T2 DM cx by neuropathy & retinopathy
  - HTN
  - HLD
  - Osteoporosis cx by multiple compression #
  - Anemia
  - Falls cx closed fracture of pubis (2013)

• **Social Hx:**
  - Husband is main caregiver
  - Staying with daughter & son-in-law
  - Has a helper who mainly look after 2 grandchildren

• **Functional State:**
  - ADLs independent

• **Diabetes Outpatient Clinic (Jun 15- Dec 2015)**
  - Weight : 37.0 - 37.9kg
  - BP : 98 /55 - 110/60
  - HbA1c : 10.8 → 12.9 → 11.6%
  - Random BG: 15.3 - 29.7 mmol/L
  - SMBG : 8.1 - 26.1mmol/l (pre-meal)
    > 20.0 mmol/L (post-meal)

• **Current Medications**
  - Insulin Insulatard 6 units bd
  - Insulin Actrapid 6 units bd
  - Metformin 250mg om
  - Omeprazole 20mg om
  - Simvastatin 40mg on
  - Ferrous Fumarate 200mg om
  - Calcium Carb 2 tab bd

• **Reasons of referral...**
  - Referred to home visit team in Dec 15
  - **Reasons:**
    - FBG: 29.7 mmol/L, Sodium: 127 mmol/L
    - Refused admission
The approach

Assessment → Issues Identified → Plan/Intervention → Goal of Care

Mdm Chang

- Diabetes related issues
- Psychosocial issues

Plan/Intervention

Goal of Care

- Main caregiver stress
- Struggle with insulin injection/ SMBG/ diet control with patient
- No cue to who to talk to when face difficulty
- Look for alternative-existing helper
- Caregiver training to help off load some of the burden from main caregiver
- Home visit & Telephonic support

3 months later...

- Weight: 37.0 - 37.9 → 39.4 kg
- BP: 98/55 - 110/60
- HbA1c: 10.8 → 12.9 → 11.6 → 7.8%
- Random BG: 15.3 - 29.7 → 10.5 mmol/L
- SMBG: 8.1 - 26.1 mmol/L (pre-meal) → < 12 mmol/L
  > 20.0 mmol/L (post-meal) → < 15 mmol/L

Communication and partnership with stakeholder improve patient diabetes care at home.

Useful Resources in Community
What you can do to help...

- Diabetes related
- TOUCH Diabetes Society of Singapore (DSS)
- Health care related services
- Community Care Centers (CHC)
- More issues, different kind of help?
- Notice financial, psychosocial issues ... ?
- AIC Silverpages
- Familiar with neighbourhood
- Social Service Office
- Family Service Centre
- Senior Activity Centre

How to refer for home visit services?

http://www.aic.sg

OR

Challenges

Evidence based practice
Limited resources
Partnership

The client

References:


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