Improving Clinical Efficiency and Effectiveness through Development of a Web-based Information Management System in Community Psychiatric Service, NTWC

SL PANG
Service Manager
Community Psychiatric Service
Castle Peak Hospital
NTWC
Community Psychiatric Service in NTWC

NTWC CPS
365 days community psychiatric care to people with mental illnesses within the NTWC cluster covering Tuen Mun, Yuen Long and Tin Shui Wai

7,200 active cases with 63,000 home visits conducted in 2016

- Physical and mental health maintenance
- Family and carer support
- Medication management
- Crisis intervention, etc.

Senior Case Managers (APN, OTI)

Case Managers (RN, OTII, ASWO)
Total: 90
Duty Team operates 365 days
Communication of management plan and intervention through the web-based real-time Duty Team Board
Ensure effective clinical handover of client who is mentally unstable and/or at risk to self or others

<table>
<thead>
<tr>
<th>Client</th>
<th>Status</th>
<th>Case Manager</th>
<th>Step up</th>
<th>Current Issues/Concern</th>
<th>Plan/Action Required</th>
<th>Action Taken</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>FUNG L M</td>
<td>SCS: CD:</td>
<td>NA TSZ HIN BENNY</td>
<td>Date: 17/08/2016</td>
<td>Schizophrenia. FU TMMHC, CMG Dr. CM Siu. Living with husband and adult daughter in TSW PHU. Harbourd persistent persecutory delusion and olfactory hallucination. She was brought to AED/TMH on 17-08-2016 as she called police and reported neighbours putting poison outside her PHU. She expressed the idea of being followed and believed neighbours installed CCTV in her home. She has no violence or self harm. She was assessed by visiting psychiatrist. Daughter and client refused admission. Early FU in TMMHC on 19 August 2016 was arranged. Daughter promised to ensure client's drug taking.</td>
<td>Monitor mental state and treatment adherence. Carer support.</td>
<td>17/08/2016 by Benny Ma. Client's daughter was contacted at 1030 hours. She reported the client to be comparatively stable with no violence or self harm behaviour. She was not emotional or irritable. Daughter had given evening drugs to the client. Management plan explained. Duty Team mobile phone number was given to client's daughter. Advised her to call us when necessary.</td>
<td>1. Daughter's mobile: 6103 3. Husband's mobile: 9123 0. 2. Please offer assistance if carer calls. 3. Please call daughter on 18 August 2016 10 am to review client's mental state and the management plan.</td>
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<td>18/08/2016 by RANG SHU LEUNG: Client's daughter was contacted at 1015 hours. Reported client was slept well last night. She will go out with the client in the afternoon. Advised to ensure drug taking of the client. Reminded to bring the client to TMMHC for FU at 1530 hours on 19 August 2016.</td>
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<td>19/08/2017 by KL Lu: Client and her daughter was seen by CMO. Quetiapine was increased from 200mg to 250 mg BD. Next FU on 23 August 2016 at 1530 hours. Drug education given and the importance of medication reiterated. Client was advised to report side effect, if any, to case manager and daughter. Carer education and support given.</td>
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## Care Pathway/Case Weighting

### Summary of ALL Active cases of LAU CHUI YING

<table>
<thead>
<tr>
<th>PCS 1</th>
<th>PCS 2</th>
<th>PCS 3</th>
<th>PPCS</th>
<th>PPCM</th>
<th>PPCY</th>
<th>PICH</th>
<th>Tier 3</th>
<th>Tier 2</th>
<th>Tier 1A</th>
<th>Tier 1B</th>
<th>Tier 1C</th>
<th>Total Active Case</th>
<th>Case Weighting</th>
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<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>22</td>
<td>0</td>
<td>30</td>
<td>0</td>
<td>27</td>
<td>25</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>52</td>
<td>77.00</td>
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**Caseload and case weighting of the case manager**

**Case complexity categorization according to client's risks and needs stratification**
- Tier 1: High
- Tier 2: Medium
- Tier 3: Low

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### Last Visit

<table>
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<tr>
<th>Last Telephone</th>
<th>Latest OPD/FU</th>
<th>Last Visit</th>
<th>Latest Depot</th>
<th>Adm. Date</th>
<th>Supervisor Review Date</th>
<th>Last Progress Report</th>
<th>Active SA</th>
<th>Special Alert</th>
<th>Living Alone</th>
<th>Living with children under 15</th>
<th>On Clin. Treat</th>
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**Last Visit Date color index:**
- Visit overdue
- FU/OPD/Depot defaulted case
- Psychiatry Admission
- PRN-FU

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e-Calendar System
It is designed to facilitate tracking of client's psychiatric follow-up attendance and to monitor their progress against the e-consultation notes. It enabled timely interventions for defaulters.
Tracking and identification of high risk or media interested cases for immediate responses and interventions
### Duty Team

<table>
<thead>
<tr>
<th>Supervisor</th>
<th>Case Manager</th>
<th>ICT Duty Case Manager(s)</th>
</tr>
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<tbody>
<tr>
<td>CHAN WAI KIN</td>
<td>1. CHAN SZE WING 2. CHENG SIU KWOK</td>
<td>1. LEUNG CHUN PONG RAYMOND 2. YAU WING YIN</td>
</tr>
</tbody>
</table>

### Stay Officers

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<tr>
<th>Supervisor</th>
<th>Officer</th>
</tr>
</thead>
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<tr>
<td>LIN YEE YAN KAREN</td>
<td>1. CHOW CHI HO 2. CHAN KIT YING KIMMY</td>
</tr>
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### Remark:

Outreach service beyond normal working hours

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<tr>
<th>Case Manager</th>
<th>Time Out</th>
<th>Estimated time to complete</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAK PUI YEE</td>
<td>16:00</td>
<td>21:00</td>
<td>Giving depot injection for working client in Yau Oi Estate from 1630 to 1715 hours</td>
</tr>
<tr>
<td>PANG SHU LEUNG</td>
<td>16:00</td>
<td>18:00</td>
<td>Visit working client in Tuen Mun Pier from 1900 to 2000 hours</td>
</tr>
</tbody>
</table>

### CPS Notice Board

<table>
<thead>
<tr>
<th>Content</th>
<th>Posted By</th>
<th>Posted On</th>
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</thead>
</table>
| 2017年4月15日(星期三)，由上午9時至下午1時於本院C座進行消防警報系統測試。鈴
當測試期間，火警鐘、公眾火警通報系統、及火警警鐘將會間歇地啟動，然而，電門鎖、冷氣系統、及升降機都不會受影響。如對測試有任何疑問，請致電設施管理組(內線7911)或與Darren (內線7912)查詢。 | PANG SHU LEUNG | 11/04/2017 |
Case managers would input their itinerary before they provide home visit. It facilitates location checking of case managers for OSH consideration.
User-based access right control for privacy and data security.

NTWC
Community Psychiatric Service Information Management System

LOGIN
CUID/LAN ID: ps050
PASSWORD: [redacted]

Timeout in: 17 mins 28 sec

- Strict user-based access right control to prevent unauthorised access

- Automatic log off if the system is idle over 20 minutes

IP address control to restrict access from other PC even in HA intranet
Results and Outcomes

Comprehensive Patient Profile
- Database included all active cases
- All cases were stratified into different levels according to their complexities so as to facilitate delivery of appropriate level of care
- E-Calendar function strengthened the tracking of defaulters and enabled timely intervention

Clinical Alert and Handover
- A total of 845 cases in unstable mental condition and/or at risk to self or others had been put up to “Duty Team Board” for clinical handover to ensure prompt and effective intervention

Overview on Case management
- Enhanced staff’s communication
- Strengthened case supervision
- Facilitated efficient clinical handover
- Enabled timely interventions by case managers

Improved Occupational Safety and Health for CPS Staff
- Ensured staff safety and quality patient care
Thank You!