The Challenges in Development of Effective Nurse Clinics

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Rundown

- Presentation
 - Introduction of Nurse Clinics
 - Triage & Early Intervention: Surgical Stream
 - Triage & Early Intervention: Medical Stream
 - Service Model: Patient Empowerment
 - Service Evaluation: Quantitative
 - Service Evaluation: Qualitative
- Open Discussions
- Round Up



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Introduction of Nurse Clinics

Rebecca Wong

Nurse Consultant (Diabetes) NTEC



Key Milestones for the Development of Nurse Clinics

2003 - Conducted a Consultancy Study on Examinations of Best Practice of HA Nurse Clinics

2000 – Implementation of Nurse Clinics & Approved Operation Guidelines for Nurse Clinics **Dec 2006** – Guidelines on Accreditation on HA Nurse Clinics

approved by

COC(N)

May 2008 – First batch of Nurse Clinics being awarded for 5-year Accreditation

1990's - Patient care clinics were run by nurses in specific areas



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Nurse Specialist Pilot Scheme 1991





HOSPITAL AUTHORITY

Specialized Patient Care Clinics

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Definition

- HOSPITAL AUTHORITY
- A formalized and structured health care delivery mode
- Nurse should demonstrate advanced nursing competence
- Support by a multidisciplinary team and can make referrals
- Employment of a holistic approach
- Key interventions are nursing therapeutics
- Key outcome measures



NURSING AND HEALTHCARE MANAGEMENT AND POLICY

Establishing a definition for a nurse-led clinic: structure, process, and outcome

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Correspondence:	WONG F.K.Y. & CHUNG L.C.Y. (2006) Journal of Advanced Nursing 53(3),				
Frances K.Y. Wong,	358-369				
School of Nursing,	Establishing a definition for a nurse-led clinic: structure, process, and outcome				
The Hong Kong Polytechnic University,	Aim. This paper reports a study to define a nurse-led clinic by exploring the domains				
Kowloon,	of structure, process and outcome.				
Hong Kong,	Background. Nurse clinics have been introduced as a measure to support interme-				
E-mail: hsfwong@inet.polyu.edu.hk	diate care after the acute phase of disease. Previous studies have been mainly des-				



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1990's - Patient care clinics were run by nurses in specific areas

Objectives

- To provide continuity of care
- To improve quality of care and clinical outcomes
- To improve access to care through advanced health assessment and service triage
- To strengthen nurse clinical leadership



Who?

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- Advanced practice nurse or equivalent level or higher with advanced academic and clinical experience
- Able to diagnosis and manage most common and many chronic diseases
- Independently and/or interdependently with other health care team members for at least 80% of his/her work



Main Functions of the Nurse Clinics

- Health assessment
 - Patient education and counselling
- Treatment compliance and symptoms control monitoring
 - Nursing consultation to in-patients and outpatients
 - Appropriate advanced nursing interventions
- Appropriate referrals and care coordination



Key Outcome Measures

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- Symptoms control
- **Prevention of complications**
- Patient satisfaction
 - **Practice outcomes**



Accredited Nurse Clinics (as at end of March 2014)

Total 145 accredited nurse clinics

- HKE region \rightarrow 22
- HKW region \rightarrow 16
- KC region \rightarrow 17
 - KE region \rightarrow 14
- KW region \rightarrow 21
- NTE region \rightarrow 33
- NTW region \rightarrow 22

(* Accreditation is underway for one additional nurse clinic.)



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For more information, visit HA internet: ha.home

→ Nurses

→ Accreditation of HA Nurse Clinics

ha.home HA Internet News Centre Even	Wednesday, 30 April 2014 中文 Sitemap Print People Search (ESD)
HAHO and Clusters HAHO HKEC HKWC KCC KEC NTEC NTWC KWC	ha.home > Nurses > Accreditation of HA Nurse Clinics Accreditation of HA Nurse Clinics Last modified date : 12.08.2013 No. of Visits : 94328
► Allied Health	Guidelines
> Doctors	Accredited HA Nurse Clinics from 2008 to 2013
▶ Nurses	Application form for Accreditation of HA Nurse Clinics 🗐
 Accreditation of HA Nurse Clinics Career Progression Model for Nurses 	Self-assessment Checklist for HA Nurse Clinics
Certificate in Infection Control for all nurses by HKU	
• NurseNET	Best viewed at 1024×768 (back rop
Nursing Grade Reform	
▶ Staff Board	

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The efficacious and effectiveness of Urology Nurse-led Triage Clinics in NTWC

Li Miu Ling

Nurse Consultant (Urology) NTWC



Traditional Work Flow of Urology Out-Patients' Journey in NTWC



Urology Nurse-led Triage Clinics in NTWC



Work Flow of Patients' Journey in LUTS

Traditional

1st Attend URO OPD after referral screening (waiting time: ~6.5 years)

6 or 12 months

Follow up Urologist: +/- medication; +/investigation

3-6 months

Refer to nurse for Behavioural therapy

New

1st attend Nurse-led LUTS clinic (waiting time: ~6-9 months after referral screening) Behavioural therapy was started at 1st visit

If doubt; consult / refer to Urologist

FU in nurse clinic in 3/12 ; 6/12 to monitor the progress.

Patients may need to wait ~7.5 years for behavioural therap

Advanced Skills in Urology Nurse-led Clinics



Ultrasound machine



Urodynamic machine



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Simple Non-invasive Behavioural Modification Therapy for Patients' Empowerment Program



Positive reinforcement

Therapeutic Management in Urology Nurse-led Clinics

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Urethral catheterization



Clean intermittent catheterization / self urethral dilatation

Caverject injection



Number of Patients Attended in Nurse-led Clinics

Attendance of Urology Nurse-led clinics



Incidentally abnormal finding by advanced skill in Urology Nurse-led clinics 2012/13 2 cases with severe bilateral hydronephrosis and hydroureter with urgent admission

One case with mass over LUQ detected by bedside USG with urgent admission and confirmed by CT was pancreatic tumour

One case with huge cystic lesion urgent refer to Gynae. and confirmed ovarian tumour

Urology appointment advanced

Uterine fibroid



hydronephrosis



Significant hydronephrosis ~8%

? bladder mass 0.4%

Chronic Retention of Urine ~2.6%

Severe pelvic organ prolapse 0.1%

目局 [AL ITY Reduced the urology SOPD waiting time for non-life-threatening Diseases: from 6.5 years to less than one year

Reduced E-admission of AROU cases to acute surgical ward by **44%** (280/632)

Outcomes of Urology Nurseled service implemented

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Decrease LOS before & after major operation by transiting patient from hospital care to clinic setting thro' patient & relatives' empowerment: ~ 2-5 days (post-op radical cystectomy with continent diversion)

Reduced unplanned admission and re-admission: ~ 2-4 cases/month

Decrease hospital-acquired infection e.g. CAUTI thro' staff knowledge promotion and decrease indwelling urethral catheter by **promoting CIC or SPC**

Lengthen Urological cancer patients' follow up by urologist: from every 3 months to 6 months

Pre-consultation Triage Nurse Clinic for New Diabetes Referrals

Elaine Leung

Nurse Consultant (Diabetes) HKWC



Extend Scope of Service: Before Doctor Consultation

Early assessment & management for newly referred DM patient

Objectives:

- Incorporated risk stratification to ensure high risk patients have timely access to specialist care
- Minimize the risk of deterioration in condition while awaiting new case appointment
- A proactive response to an expected increase in service need



A Case Sharing

Inadequate information in most referrals!

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Ductor: May obstan	and further management will be much appreciated.	
Rumarka	Yours isomuly,	





Protocol Driven & Structured Program

<u>Visit 1</u>

Baseline assessment Blood Ix DM education Infection screening Complication assessment Foot assessment Dietician assessment FU planning • New case

- Admission
- Other clinic FU
- DM centre visit 2

Visit 2

- Review Ix results Assess progress Modification of Rx FU planning
- New case
- Admission
- Other clinic FU
- DM centre visit 3

Visit 3

Assess progress Modification of Rx FU planning

- New case
- Admission
- Other clinic FU



Evaluation

- Total number of cases referred: 151 (01/02/2009 – 31/7/2009)
 - DM nurse waiting time: 5.39 ± 3.14 weeks
- Number of DM nurse visit: 2.03 ± 1.23 sessions



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19.2 % started insulin therapy



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Evaluation



Early detection and intervention of DM related complications

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Glycaemic Improvement Before Doctor Consultation





HbA1c Level





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Pre-consultation Triage Clinic for New Diabetes Referrals

Works together with other programs, the new referral waiting time of DM clinic of QMH has been decreased

	2009	2010	2011	2012
(in weeks)	31	25	17	18



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Irene Kong

Nurse Consultant (Renal) KWC



Outcomes

- Maximized functional capacities & physical performance and/or changes in health status
- Developed / Modified independent health-promoting behaviors
- Improved and / or maintained patients' quality of life particularly family functioning via optimal adjustment to living with the disease

Enhanced the acceptance of diseases.

Improved patients' satisfaction of care

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- Improved patients' confidence feeling to be in control of their illness
- Reduced unplanned hospitalization.

Therapeutic Nursing Interventions Knowledge & Skills to be transferred **Patient Attributes** (individualized): Information giving related to treatment • Individualized Decision-making and problem solving skillsknowledge • acquisition Patient and relatives' participation in the plan Receptive to of care education Adaptation skills: Give information to Active enhance patient's compliance. Promote participation adaptation and rehabilitation Motivation Adaptability Patient Education and Care Commitment Symptoms control Capability Prevention of complications ٠ Patient / family's satisfaction of care . Supportive counselling

Formulate plan of care

Patient Care Pathway

developed by multi-disciplinary team

3 core components of the care pathway

- Health improvement plan with multidisciplinary team and patient involvement
- 2. Patient education & teaching materials e.g. education class, patient

teaching package CD/VCD, brochure.

3. Patient self-management

Reference: Hickey et al.1997



Patient Care Pathway developed by multidisciplinary team

3 core components of the care pathway

1. Health improvement plan with multidisciplinary team and patient involvement

Patient education & teaching materials

 e.g. education class, patient
 teaching package CD/VCD, brochure

 Patient self-management



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Therapeutic Nursing Interventions

Knowledge & Skills to be transferred (individualized):

- Information giving related to treatment
- Decision-making and problem solving skills- Patient and relatives' participation in the plan of care
- Adaptation skills: Give information to enhance patient's compliance. Promote adaptation and rehabilitation

Patient Education and Care

- Symptoms control
- Prevention of complications
- Patient / family's satisfaction of care
- Supportive counselling
- Formulate plan of care



Patient Attributes

- Individualized knowledge acquisition
- Receptive to education
- Active participation
- Motivation
- Adaptability
- Commitment
- Capability

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Outcomes

- Maximized functional capacities & physical performance and/or changes in health status
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- Improved patients' confidence, feeling to be in control of their illness
- Reduced unplanned hospitalization



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A Randomized Study to Evaluate the Effectiveness of a Nurse Clinic Led by Nurse Consultant in High Risk Type 2 Diabetic Patients

Rebecca Wong

Nurse Consultant (Diabetes) NTEC



Background

Public Hospitals in HK, diabetes is presented in:

- 15% of patients in medical clinics
- 30% of patients with heart disease or stroke
- 40 % of patients on dialysis

Chan JCN Diabetes Care 1997. Lam TH Diabetic Med 2000, Cockram CS Diab Res Clin Prec 1993



Background

- HOSPITAL AUTHORITY
- Optimal control of risk factors reduced risks of microand macrovascular complications
- However, the rates of attaining metabolic targets remained poor
- < 5% type 2 DM patients were at goal for all three cardio-metabolic risk factors of blood pressures (BP)
 <130/80 mmHg, low density-lipoprotein cholesterol (LDL-C) <2.6 mmol/l, and glycemia (HbA1c<7%)

United Kingdom Prospective Diabetes Study (UKPDS) Group. Intensive blood-glucose control with sulphonylureas or insulin compared with conventional treatment and risk of complications in patients with type 2 diabetes (UKPDS 33). *Lancet* 1998; 352(9131): 837-853.

Gaede P, Lund-Andersen H, Parving HH, Pedersen O. Effect of a multifactorial intervention on mortality in type 2 diabetes. *N Engl J Med* 2008; 358(6): 580-591 Kong AP, Yang X, Ko GT, So WY, Chan WB, Ma RC, et al. Effects of treatment targets on subsequent cardiovascular events in Chinese patients with type 2 diabetes. *Diabetes Care* 2007; 30(4): 953-959.



Hypothesis

In type 2 diabetic patients with or at high risk for cardiovascular disease receiving collaborative care (CC) led by diabetes nurse consultant and regular telephone reminders improved cardiometabolic control and cognitivepsychological-behavioral measures compared to usual care (UC).



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Study Design



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Nurse Clinic



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Clinical Outcomes

Primary endpoints:

- Metabolic changes in HbA1c,
 - **Blood Pressure & Lipid**
- The percentage of patients attaining the
 - treatment targets was as defined:
- HbA1c <7%
- BP <130/80 mmHg
- LDL-C <2.6 mmol/L



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Clinical Outcomes

Secondary endpoints:

- Changes in body weight
- Cognitive-psychological-behavioral scores by using validated instruments



Validated Instruments

- Depression Anxiety and Stress Scale (DASS21)
- Diabetes Empowerment Scale (C-DES)
- Summary of Diabetes Self Care Activities (SDSCA)
- General Health Questionnaire (GHQ-12)
 - Diabetes Knowledge scale
- Heart Disease Fact Questionnaire

Taouk M, Report for New South Wales Transcultural Mental Health Centre, Cumberland Hospital, Sydney. 2001. Shiu AT et al, Psychol Health Med 11:198-208, 2006. Tang YH et al, J Adv Nurs 62:74-83, 2008 Shek DT. J Clin Psychol 43:683-91, 1987. Shek DT.J Clin Psychol 45:890-7, 1989. Lee, C. S. L. & Shiu, A. T. Y. Journal of Clinical Nursing, 13, 534-535. Lee, K. H. & Shiu, A. T. Y. Proceedings of the Eleventh Hong Kong diabetes and cardiovascular risk factors – East Meets West Symposium. (p. 24). Hong Kong, Oct 2009



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Results



Clinical Characteristics at Baseline of the 242 Patients

Clinical parameters	Total patients (n=242)	Cases (n=120)	Control (n=122)	p-values
Age, years	61.8±9.3	61.8± 9.1	61.8± 9.5	0.958
Men, n (%)	146 (60.3)	68 (56.7)	78 (63.9)	0.293
Duration of DM	13.02 ± 8.117	13.0 ± 8.04	13.04 ± 8.225	0.928
BMI, kg/m2	25.9±4.0	25.8±3.8	26.0±4.2	0.697
S BP	136.8 ±18.5	138 ± 18.4	135.5 ± 18.6	0.296
D BP	77.4 ± 10	78 ± 10	77±9.8	0.360
Fasting blood Sugar	9.6±3	9.5 ± 3.3	9.7 ± 2.7	0.560
HbA1c	9.3 ± 1.4	9.5 ± 1.5	9.1±1.1	0.026
Cholesterol	4.6 ± 1.1	4.7 ± 1.2	4.6±1	0.389
HDL	1.1±0.3	1.1±0.3	1.1±0.3	0.944
LDL	2.5 ± 0.9	2.5 ± 0.9	2.5 ± 0.9	0.991
Triglyceride	2.2±1.8	2.3 ± 2.1	2.1±1.4	0.588



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Clinical Characteristics at Baseline of the 242 Patients

	Total n=242	CC n=120	UC n=122
Insulin Therapy	114 (47.11%)	62 (51.67 %)	52 (42.62%)
Stroke	33 (13.64%)	17 (14.17%)	16 (13.11%)
CHD	72 (29.75%)	30 (25%)	42 (34.43%)
MI	24 (9.92%)	12 (10%)	12 (9.84%)
Cardiac failure	22 (9.09%)	11 (9.17%)	11 (9.02%)
Coronary Intervention	61 (25.21%)	23 (19.17%)	38 (31.15%)
Renal impairment	131 (54.13)	61 (46.56%)	70 (53.44%)
Renal failure	20 (8.27%)	10 (8.33%)	10 (8.20%)
DM retinopathy	36 (14.88%)	24 (18.33%)	14 (11.48%)
LEA	1 (0.41%)	0	1 (0.82%)



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Results between Collaborative Care (CC) & Usual Care (UC)

	22/1/1/19/8	CEL Mod Store									
ALCOLOGIA		CC			UC			Absolute difference			
		Baseline	At completion	P value	Baseline	At completion	P value	СС	UC	P value	
and a state of the second second	HbA1c (%)	9.5 ± 1.5	7.9 ± 1.1	0.05	9.1 ± 1.1	8.2 ± 1.5	0.05	1.43 ± 1.65	0.81 ± 1.54	0.05	
ARPRILIE.	SBP (mmHg)	138 ± 18.4	135.2 ± 17.5	0.16	135.5 ± 18.6	138.1 ± 17.9	0.04	2.90 ± 21.08	3.23 ± 16.88	0.02	
and and and	LDL-C (mmol/L)	2.5 ± 0.9	2.2 ±0.7	0.05	2.5 ± 0.9	2.4 ± 0.8	0.32	0.39 ± 0.72	0.08 ± 0.8	0.02	
	管理					5					
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Comparing at least 1% Reduction of HbA1c



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Comparing Percentage of Patients' HbA1c <7%



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The Change of HbA1c from Baseline between 2 Groups





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The Improvement of ABC Targets and Percentage Change Compare to Baseline in 2 Groups



Comparing BW Reduction



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Results of Diabetic Knowledge and Level of Self Efficacy at Completion of Study



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Summary of Results

- OSPITAL' AUTHORITY
 - Greater improvement in ABC and body
 weight control
 - Better knowledge in disease, efficacy and self care
 - Decrease of anxiety level in CC group than UC group



Enhancement of Self Management/ Empowerment of Patient: Qualitative Evaluation

Ling Wai-man

Nurse Consultant (Oncology) HKEC



A Case Sharing

- Mr. Y, M/71, inoperable cholangioCA, for palliative chemotherapy.
- Accompanied by his wife & 2 daughters for the 1st Chemotherapy Nurse Clinic consultation.
- Everything alright except 5% drop in BW in 10 days.





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Ask & Listen

- Patient had reduced his oral intake by half deliberately since knowing the diagnosis of cancer.
- His believes:
 - "Good nutrition will nourish the cancer"
 - "Diet control can starve the cancer to death"





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Information Sharing

- Shared correct information using both the perspectives of Western & Chinese Medicine.
- At last, he agreed, & showed the willingness to follow my new suggestions.
- Thereafter, no more self starvation. BW showed a steady increase.





Key Points to Success

- Be sensitive
- Give time to listen & to understand patient's value & belief
- Have good communication skills, including being culturally sensitive & relevant
- Give the correct information as appropriate

Respect & rapport → Successful empowerment → Behavioural change



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Chemo Nurse Clinic (PYNEH)

- Help the cancer patients / family to effectively manage the potential treatment side effects & cope with the psychosocial stress.
- By means of high sensitivity, good communication skills & accurate information giving.

"High Touch"



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Patient Satisfaction Survey - 2013

Mean score in the empowerment item:



Written comments:

"每位護士對本人的關顧, 令我充滿勇氣去接受和完成整個療程" (The care by every nurse has given me the courage to accept and complete my whole course of treatment)



The Challenges in Development of Effective Nurse Clinics

Open Discussions



