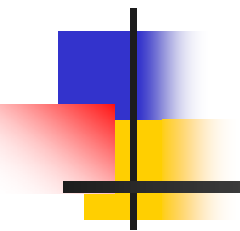


# STEP-DOWN CLINIC AND OTHER NEW MODELS FOR CKD CARE



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## THE TRADITIONAL MODEL

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- Family doctor discovers (often late) that patient has decreased renal function
- Additional tests are done to diagnose cause of CKD
- Patient is referred to nephrologist
- Nephrologist takes over care



## PROBLEMS WITH THIS MODEL

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- The number of new cases of CKD is growing and exceeds capacity of nephrologists to see all of them, and continue to see all of them
- Waiting time for appointments is getting longer
- Patients may have further decline in renal function while they wait



## POTENTIAL SOLUTIONS

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- Improved tools for GPs to monitor their patients
- Practical education for GPs to manage their CKD patients better
- Improved communication between GPs and specialists
- Return stable patients back to GP with a care plan



## EDUCATION ENHANCING COMMUNICATION

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- 1-hour small group case discussion to be held in renal conference room
- GPs each select a CKD case and fax info in advance to nephrologist
- Nephrologist prepares relevant slides, handouts
- Group discusses cases and has time to see renal unit afterwards



# EXAMPLES OF EXISTING TOOLS FOR FAMILY DOCTORS

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- BC MOH on-line toolkit
- Electronic Medical Records (recall reports, trend plots, decision support)
- Uniform lab reporting of eGFR
- Care plan templates for complex patients ( +new BCMA fee structure)

# The Expanded Chronic Care Model: Integrating Population Health Promotion



♦ = MANDATORY FIELDS

♦ PATIENT NAME		♦ HEALTH # (E.G. BC PHN)		♦ DATE OF VISIT (DD-MMM-YYYY)	
♦ BIRTHDATE (DD-MMM-YYYY)		♦ GENDER <input type="checkbox"/> MALE <input type="checkbox"/> FEMALE		♦ PHONE (INCLUDE AREA CODE)	
PRACTICE TEAM ID		CHART NUMBER			
♦ PROVIDER ID (MSP PRACTITIONER NUMBER / NAME)					
<b>CO-MORBID CONDITIONS</b> <input type="checkbox"/> ALCOHOL OVERUSE <input type="checkbox"/> CARDIOMYOPATHY <input type="checkbox"/> DIABETES <input type="checkbox"/> LIVER DISEASE <input type="checkbox"/> SUBSTANCE ABUSE <input type="checkbox"/> ARTHRITIS <input type="checkbox"/> CHF <input type="checkbox"/> HEPATITIS C <input type="checkbox"/> OBESITY <input type="checkbox"/> VALVULAR HD <input type="checkbox"/> ASTHMA <input type="checkbox"/> COPD <input type="checkbox"/> HYPERTENSION (HTN) <input type="checkbox"/> OTHER RHYTHM PROBLEM <input type="checkbox"/> OTHER <input type="checkbox"/> ATRIAL FIBRILLATION <input type="checkbox"/> CAD <input type="checkbox"/> KIDNEY DISEASE <input type="checkbox"/> PERIPH. VASC. DISEASE <input type="checkbox"/> DEPRESSION <input type="checkbox"/> LIPOD ABNORMALITY <input type="checkbox"/> SMOKING					
♦ DIAGNOSIS: TYPE OF KIDNEY DISEASE <input type="checkbox"/> DIABETES <input type="checkbox"/> HYPERTENSION <input type="checkbox"/> POLYCYSTIC KD <input type="checkbox"/> OTHER					DATE OF DIAGNOSIS (DD-MMM-YYYY)

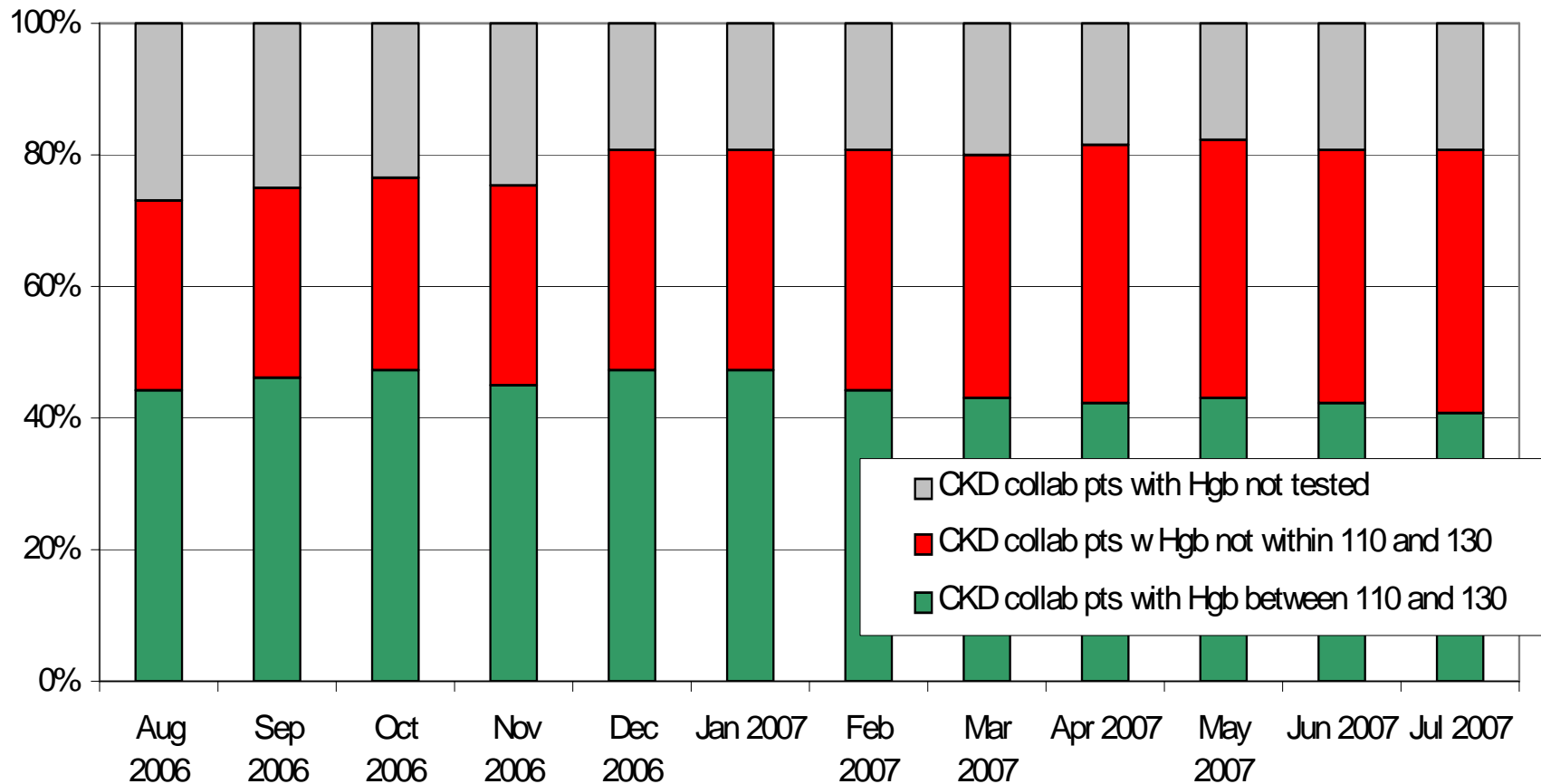
**PATIENT ENCOUNTERS, DIAGNOSTIC/CLINICAL DATA, BY DATE**

✓ = RECALL

REVIEW		MOST RECENT DATA			NEW DATA
EVERY VISIT	PHYSIOLOGY	Blood Pressure < 130/80			ENTER VALUE /
	PHYSIOLOGY	Weight BMI Target: Stable (18.5 - 24.9)			<input type="checkbox"/> LBS <input type="checkbox"/> FT IN <input type="checkbox"/> KG <input type="checkbox"/> CM - or - BMI:
6 MONTHS	KIDNEY FUNCTION	eGFR Target: Stable (< 10% reduction per year)			ENTER VALUE
	KIDNEY FUNCTION	ACR ≥ 50% reduction from Baseline Microalbumin Screen (Albumin: creatinine ratio) For CKD, normal range = 2-20 M, 2.8-28 F			ENTER VALUE OR <input type="checkbox"/> POS <input type="checkbox"/> NEG
3 MOES	SUGAR	A1C Target: < 7% (< 0.070)			ENTER VALUE
ANNUALLY OR AS INDICATED	LIPID PROFILE	LDL-C < 2.5 mmol/L High Risk; < 3.5 mmol/L Moderate			ENTER VALUE
		Ratio (TC/HDL) < 4.0 High Risk; < 5.0 Moderate			ENTER VALUE
	ANEMIA	Hgb Target: >110 g/L			ENTER VALUE
		TSAT Target: >20%			ENTER VALUE
	MINERAL METABOLISM	Calcium Target: > 2.1 mmol/L			ENTER VALUE
Phosphorus Target: 0.8 - 1.4 mmol/L				ENTER VALUE	
PTH in Normal Range Target 2.5-7.70 pmol/L if eGFR between 30 & 60				ENTER VALUE	



## Patients of CKD Collab Physicians with last eGFR <50 and Hgb tested (and between 110 and 130) in previous 12 months

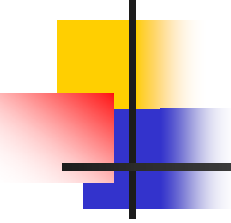




# QUALITY IMPROVEMENT FEEDBACK IN **VIHA** COLLABORATIVE

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- GPs may sign an authorization for medical lead to view their patient data
- GPs then grant access on-line to their patients in CKD sub-group
- Medical lead views data extremes, completeness, adherence to guidelines and provides confidential feedback



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Jan. 15/07

Dear \_\_\_\_\_,

Thank you for returning the authorization and granting me access to your CKD patients on the toolkit.

After reviewing the 2 patients with eGFRs <50, the data seems complete and up to date. I can't tell if these patients have had an ultrasound to r/o any obstruction or other surgically treatable causes of renal impairment. This may be something you would consider if not done already.

I see that N\_\_\_\_ B\_\_\_\_ has come to the clinic for an education session, and you may want to offer this to E\_\_\_\_\_ E\_\_\_\_\_ as well. Just call our receptionist at 370-8224.

Please feel free to contact me if you have any questions about these or other kidney patients.

Sincerely,  
Nancy Craven, MD

# Complex Care Plan Template

**Initial Planning Date:** \_\_\_\_\_

**Patient Name:** \_\_\_\_\_  
\_\_\_\_\_

**Condition #1:** \_\_\_\_\_ **Condition #2:** \_\_\_\_\_  
\_\_\_\_\_

**Diagnostic Code:** \_\_\_\_\_

**Patient Values/Goals:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Plan for Management of Co-Morbid Conditions:**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Linkage with other Health Care Professionals:**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Discussed with AHP:** \_\_\_\_\_  
**Expected Outcomes:**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Time frame for Re-Evaluation:** \_\_\_\_\_  
\_\_\_\_\_

**Discussed with: Patient** \_\_\_\_\_ **Representative:** \_\_\_\_\_



## TRIAL OF STEP-DOWN CLINIC

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- One nephrologist, 6 GPs
- Patients had been referred and followed for > 1 year by nephrologist
- Patients had stable GFR and other parameters; suitable for return to GP
- Consent by GP and patient



## STEP-DOWN CLINIC PROCEDURES

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- One patient appt. with liaison GP in Kidney Care Clinic
- Review of patient's concerns, key medical issues, lab results, meds
- Brief exam, BP measurement
- Completion of Care Plan form, with copies to patient, GP and file

**KIDNEY CARE STEP-DOWN CLINIC  
CARE PLAN**

**Patient:**  
**Family Doctor:**

**DOB:**

**Copies to:**

**Date Seen:**

**eGFR:**

**PATIENT'S CONCERNS/ISSUES**

- 
- 1.
- 2.
- 3.
- 4.

**MAJOR CURRENT MEDICAL ISSUES**

- 
- 1.
- 2.
- 3.
- 4.

**CARE PLAN**

-  
**Goals:**

**Lab test monitoring:**

**Cautions/risks:**



# FUTURE POSSIBILITIES

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- Shared care service agreements between GPs and specialists
- Group visits (1 physician/allied health provider seeing several patients at once)
- Satellite CKD clinic in rural community
- Telehealth consultations