

## Review of chronic disease management of hepatitis C -from diagnosis to treatment- at VNHS Medical Clinic

### 1) Purpose

The primary purpose of this project is to analyze the chronic disease management of hepatitis C virus (HCV) infection at NVHS Medical Clinic. The objective is to identify deficiencies in the HCV care cascade and to provide a baseline for improvement efforts at the clinic. By updating relevant HCV data in the electronic medical record, this research project will also serve as a quality improvement project and capture missed or new incidences of HCV infection in the study period. The overall goal is to reduce the future burden of chronic HCV infection on both the patients and the health care system, through case identification and disease management.

### 2) Hypothesis

We hypothesize that screening for HCV and registering patients in the disease registry for proper follow-up has not been systematic, resulting in many unidentified chronic VCH infections. Also, the diagnosis to referral process in the HCV has been deficient. Therefore, we will conduct a review of the available clinical data at VNHS Medical Clinic January 1st 2009 to January 1st 2014 to gain further insight on the issue.

### 3) Justification

Chronic HCV infections remain a significant public health burden in Canada, affecting nearly 1% of the general population (Myers, Ramji et al. 2012), approximately 1.5% in British Columbia (Buxton and Kraiden 2007, Buxton, Rathon et al. 2009), and up to 90% of long-term injection drug users (IDUs) (Diaz, Des Jarlais et al. 2001, Patrick, Tyndall et al. 2001). The incidence rate of HCV-related morbidities, such as decompensated liver disease and hepatocellular carcinoma, and mortality are expected to continue to rise in next decades (Myers, Ramji et al. 2012).

Chronic HCV infection is a treatable condition using a care cascade that encompasses case identification, disease management, and once the patient is ready referral and uptake of treatment. Uptake of treatment continues to be low as well, with estimates only around 1% of treatment uptake and even fewer cases of sustained virologic response in a large cohort of inner city population in Vancouver (Grebely, Raffa et al. 2009, Alavi, Raffa et al. 2014).

Information regarding hepatitis C cases and the related sequelae are required to inform health care planning and the allocation of resources (Myers, Ramji et al. 2012). To provide a population perspective regarding the delivery and uptake of HCV care at VNHS Medical clinic, a chronic disease management framework can be applied. The HCV Care Cascade can be summarized by the following steps: 1) Screening, 2) Diagnosis 3) Referral 4) Initiation of treatment, and 5) and Sustained Virological Response (SVR), 6) prevention of re-infection.