

Health Maintenance Review (CTRL H)

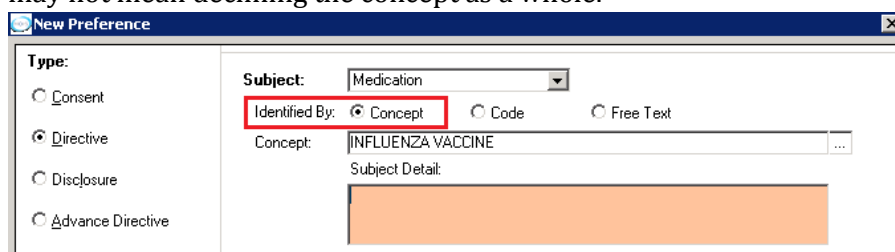
Revised: May 25, 2016

How CTRL H Works:

- Each precondition section of the Health Maintenance Review and all the screening elements within each section are managed by Concepts.
- Concept Mapping is found in the Administration module, and is user-editable, meaning clinics can add their own codes to concepts and create their own, new concepts. As such, the specific elements in each concept may differ between clinics.

How Items are Displayed:

- When you expect an item to show in CTRL H, but it is not shown, **always check the concept**. The particular code you are searching for may not be included in the concept, and you may have to select a different code.
- When creating patient preferences that will be shown on CTRL H, always record the Preference using a concept, not a specific code. Because CTRL H is concept-based, creating a Preference for a specific code will not reflect on Health Maintenance, as declining one code may not mean declining the concept as a whole.



- Items shown on CTRL H will show the record description and the date of the last record. If there is no record for that item, it will display the record description and "Not Found"
 - o If this item is a measurement, it will also display the last recorded value.
 - o For Measures with an associated quantitative goal or reference range, it will also display the target values in grey to the right of the item.

DIABETES, TYPE 2, - UNCOMPLICATED

CHOLESTEROL - LDL	- 2006.07.05 - 4.15 A	[0 to 3.5]	
CHOLESTEROL - HDL	- 2006.07.05 - 3.8	[0.9 to 10]	GOAL: <= 3.5
CHOLEST SERPL-SCNC	- 2006.07.05 - 5.45 A	[0 to 5.2]	
CHOL/HDL RATIO	Not Found		

- You will notice that some items are shown in blue and others are shown in red. Blue items are completed items, associated with a date of service. Red items are items that are highly recommended for screening the patient, but have not yet been completed.
 - o The exception is HIV Screening with the General section. This is shown in blue if not completed, as it may not be necessary to screen every patient for HIV.

How to Read This Document:

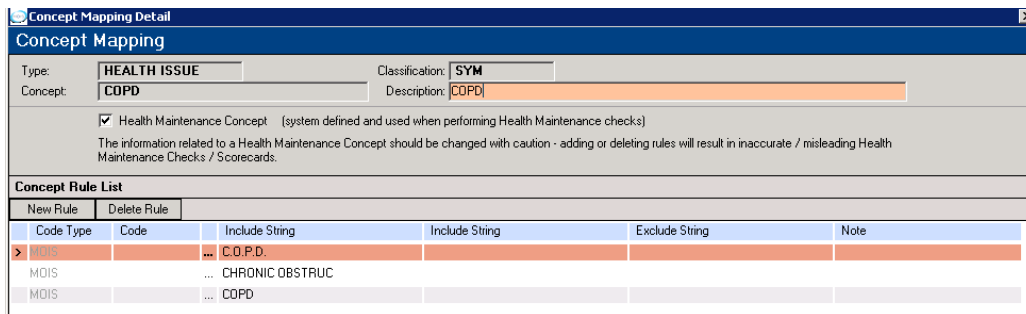
- Preconditions are the records that must be present in the patient's chart to prompt the particular Screening Elements on the patient's CTRL H.
- As mentioned above, CTRL H is controlled by concepts. Consider the example of COPD:

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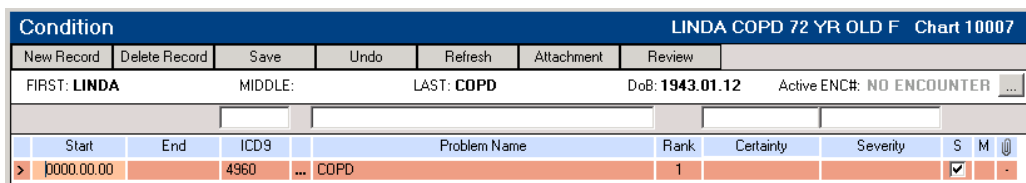
COPD
SPIROMETRY - 2011.08.12 - SEE ATTACHED [ N/A ]
FEV1 % PREDICTED POST BRONCHODILATO - 2011.08.01 - 45 L [ 80 to 100 ]
FEV1/FVC POST BRONCHODILATOR - 2009.11.24 - 0.36 L [ 0.7 to 1 ]
WEIGHT - 2015.01.08 - 57.6 [ N/A ]
HEIGHT - 2015.01.08 - 157 [ 20 to 210 ]
CIGARETTES SMOKED.CURRENT (PACK/DAY - 2013.02.20 - 0 [ 0 to 0.01 ]
PHYSICAL ACTIVITY MINUTES PER WEEK - 2013.02.20 - 45 L [ 150 to 1500 ]
PNEUMOCOCCAL VACCINE - 2012.12.04
INFLUENZA VACCINE - 2013.11.14
  
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COPD (Health Issue 6)	If resolve date <ul style="list-style-type: none"> ➤ State it Else <ul style="list-style-type: none"> ➤ SPIROMETRY (Measure) ➤ FEV1%POST (Measure) ➤ FEV1/FVCPO (Measure) ➤ WEIGHT (Measure) ➤ HEIGHT (Measure) ➤ CIGARETTES SMOKED PACKS PER DAY (Measure) ➤ PHYSICAL ACTIVITY MINUTES PER WEEK (Measure) ➤ PNEUMOCOCCAL VACCINE (Medication) ➤ INFLUENZA VACCINE (Medication)
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- COPD is a Health Issue. When we open the COPD concept within the Concept Mapping folder of the Administration module, we see that CTRL H will show the COPD section if the patient has a record including any of these three text strings in the Conditions folder of the Patient Chart.



In the chart:



- Considering the Screening Elements for COPD, we can see that Spirometry is a Measurement concept. Opening the Spirometry concept within the Concept Mapping folder,

we can see that CTRL H will find Spirometry values if any of the following Measurement codes are present in the Measures folder of the patient's chart.

- If more than one of these measurements is found in the chart, CTRL H will show the most recent measurement.

Concept Mapping Detail

Concept Mapping

Type: **MEASURE** Classification: **SYM**
 Concept: **SPIROMETRY** Description: **SPIROMETRY**

Health Maintenance Concept (system defined and used when performing Health Maintenance checks)
 The information related to a Health Maintenance Concept should be changed with caution - adding or deleting rules will result in inaccurate / misleading Health Maintenance Checks / Scorecards.

Concept Rule List

Code Type	Code	Include String	Exclude String	Note
> MDIS	40003	...		FEV1 % PREDICTED POST BRONC
MDIS	40004	...		FEV1 % PREDICTED PRE BRONC
MDIS	40005	...		FEV1/FVC POST BRONCHODILAT
MDIS	40006	...		FEV1/FVC PRE BRONCHODILATO
MDIS	493	...		SPIROMETRY

- Keep in mind that users can edit concepts, so each clinic's concepts may include different codes.

PRECONDITION	SCREENING ELEMENTS
F – =>50 to =<70	MAMMOGRAPHY (Image)
F – =>18 to =<70	PAP SMEAR (Measure)
F – =>18 to =<70	HYSTERECTOMY (Procedure)
F – Age =>60 to <80	OSTEOPOROSIS SCREENING <ul style="list-style-type: none"> ➤ OSTEOPOROSIS SCREENING (Measure); OR ➤ BONE DENSITY MEASUREMENT (Image)
M – Age 35> to <60	SERUM CHOLESTEROL (Measure)
M – Age 35> to <60	CHOLESTEROL/HDL RATIO (Measure)
M – Age 65> to <80	ABDOMINAL IMAGING (Image)
Age 65 and older	PNEUMOCOCCAL VACCINE (Medication)
Age 65 and older	INFLUENZA VACCINE (Medication)
Age 65 and older	LEVEL OF INTERVENTION (Intervention) <ul style="list-style-type: none"> ➤ This will also populate if an ADVANCE DIRECTIVE is present (Preferences)
Age 45 and older	FASTING GLUCOSE (Measure)
Age =>50 to =<74	SCREENING FECAL OCCULT BLOOD <ul style="list-style-type: none"> ➤ STOOL OB (Measure)
Age =>50 to =<74	BOWEL ENDOSCOPY (Procedure)
Age >11	PHYSICAL ACTIVITY MINUTES PER WEEK (Measure)
Age >11	ALCOHOL CONSUMPTION (Measure)
Age >11	CIGARETTES SMOKED PACKS PER DAY (Measure)
Age >11	WAIST CIRCUMFERENCE (Measure)
Age >11	BMI (Measure)
Age >25	TETANUS VACCINE (Medication)
Age >18	BP (Measure)
SMOKER	SMOKER (Health Issue) <ul style="list-style-type: none"> ➤ Calculated years based on stop date and / or beginning date)
Age >18	HIV 1 + 2 ANTIBODY (Measure)
STI/BBP Test	If a STI BBP test is completed: <ul style="list-style-type: none"> ➤ STI/BBP (Measure) ➤ HIV 1 + 2 ANTIBODY (Measure) This is item is designed to screen for HIV test post an STI/BBP test.
If present...	GFR (Measure)
Incentive Claims	Loop each claim, include date of service
ANTICOAGULATION (Health Issue)	If resolved date, <ul style="list-style-type: none"> ➤ states it else <ul style="list-style-type: none"> ➤ INR (Measure)

PRECONDITION	SCREENING ELEMENTS
HYPERLIPIDEMIA (Health Issue)	If resolve date <ul style="list-style-type: none"> ➤ State it Else <ul style="list-style-type: none"> ➤ CHOLESTEROL/HDL RATIO (Measure) ➤ SERUM CHOLESTEROL (Measure) ➤ HDL ➤ LDL ➤ TRIGLYCERIDES (Measure)
FRAILITY (Health Issue)	If resolve date <ul style="list-style-type: none"> ➤ State It Else <ul style="list-style-type: none"> ➤ FRAILITY INDEX (Measure) ➤ LOI ASSESSMENT (Intervention) or ADVANCE DIRECTIVE (Preferences)

PRECONDITION	SCREENING ELEMENTS
HIV (Health Issue)	<p>If resolve date</p> <ul style="list-style-type: none"> ➤ State it <p>Else</p> <ul style="list-style-type: none"> ➤ HIV 1 + 2 ANTIBODY (Measure) ➤ CD4 HELPER COUNT (Measure) ➤ CD4adir (this is calculated ... this is based on the CD4 helper) ➤ CD4 HELPER PERCENT (Measure) ➤ HIV VIRAL LOAD (Measure) ➤ HIV 1 - RNA (Measure) ➤ HEMOGLOBIN (Measure) ➤ WBC (Measure) ➤ PLATELETS (Measure) ➤ GFR (Measure) ➤ ALANINE AMINOTRANSFERASE (Measure) ➤ ASPARTATE AMINOTRANSFERASE (Measure) ➤ INR (Measure) ➤ ALBUMIN (Measure) ➤ TSH (Measure) ➤ VIT B12 (Measure) ➤ FOLATE (Measure) ➤ PLATELETS (Measure) ➤ CORTISOL AM (Measure) ➤ TESTOSTERONE FREE (Measure) ➤ HEP C RNA PCR (Measure) ➤ HEP C GENOME (Measure) ➤ HEP B TESTS (Measure) ➤ HEP B SURFACE ANTIBODY (Measure) ➤ HEP B CORE ANTI BODY (Measure) ➤ HEPATITIS A ANTIBODIES (Measure) ➤ TOXOPLASMOSIS SEROLOGY (Measure) ➤ SYPHILIS (Measure) <p>If Female then</p> <ul style="list-style-type: none"> ○ CERVIX CULTURE (Measure) ○ CHLAMYDIA (Measure) <p>End if</p> <ul style="list-style-type: none"> ➤ PNEUMOCOCCAL VACCINE (Medication) ➤ INFLUENZA VACCINE (Medication) ➤ HEP A VACCINE (Medication) ➤ HEP B VACCINE (Medication) ➤ MENINGOCOCCUS VACCINE (Medication) ➤ HIB VACCINE (Medication) ➤ TETANUS VACCINE (Medication) ➤ TB SKIN TEST (Intervention)

PRECONDITION	SCREENING ELEMENTS
CEREBROVASCULAR DISEASE (Health Issue)	<p>If resolve date</p> <ul style="list-style-type: none"> ➤ State it <p>Else</p> <ul style="list-style-type: none"> ➤ BP (Measure) ➤ CHOLESTEROL/HDL RATIO (Measure) ➤ SERUM CHOLESTEROL (Measure) ➤ HDL ➤ LDL ➤ TRIGLYCERIDES (Measure) ➤ CIGARETTES SMOKED PACKS PER DAY (Measure) ➤ PHYSICAL ACTIVITY MINUTES PER WEEK (Measure)
CARDIOVASCULAR DISEASE (Health Issue)	<p>If resolve date</p> <ul style="list-style-type: none"> ➤ State it <p>Else</p> <ul style="list-style-type: none"> ➤ BP (Measure) ➤ CHOLESTEROL/HDL RATIO (Measure) ➤ SERUM CHOLESTEROL (Measure) ➤ HDL (Measure) ➤ LDL (Measure) ➤ TRIGLYCERIDES (Measure) ➤ CIGARETTES SMOKED PACKS PER DAY (Measure) ➤ PHYSICAL ACTIVITY MINUTES PER WEEK (Measure)
DEPRESSION (Health Issue)	<p>If resolve date</p> <ul style="list-style-type: none"> ➤ State item <p>Else</p> <ul style="list-style-type: none"> ➤ Last encounter date ➤ PHQ-9 (Measure)
PSYCHOTIC MENTAL DISORDER (Health Issue)	<p>If resolve date</p> <ul style="list-style-type: none"> ➤ State it <p>Else</p> <ul style="list-style-type: none"> ➤ Last Encounter
UNSAFE DRUG USE (Health Issue)	<p>If resolve date</p> <ul style="list-style-type: none"> ➤ State it <p>Else</p> <ul style="list-style-type: none"> ➤ Last Encounter
UNSAFE ALCOHOL USE (Health Issue)	<p>If resolve date</p> <ul style="list-style-type: none"> ➤ State it <p>Else</p> <ul style="list-style-type: none"> ➤ Last Encounter
SPLENECTOMY (Procedure)	PNEUMOCOCCAL VACCINE (Medication)

PRECONDITION	SCREENING ELEMENTS
DIABETES (Health Issue)	<p>If resolve date</p> <ul style="list-style-type: none"> ➤ State it <p>Else</p> <ul style="list-style-type: none"> ➤ LDL (Measure) ➤ HDL (Measure) ➤ SERUM CHOLESTEROL (Measure) ➤ CHOLESTEROL/HDL RATIO (Measure) ➤ TRIGLYCERIDES (Measure) ➤ UALB/CR (Measure) ➤ GFR (Measure) ➤ HGBA1C (Measure) ➤ FASTING GLUCOSE (Measure) ➤ BP (Measure) ➤ PNEUMOCOCCAL VACCINE (Medication) ➤ INFLUENZA VACCINE (Medication) ➤ OPHTHALMOLOGY ASSESSMENT (Consult) ➤ DIABETES EDUCATION ASSESSMENT (Consult)
HEPC (Health Issue)	<p>If resolve date</p> <ul style="list-style-type: none"> ➤ State it <p>Else</p> <ul style="list-style-type: none"> ➤ ALT (Measure) ➤ AST (Measure) ➤ INR (Measure) ➤ HEP C RNA PCR (Measure) ➤ HEP C GENOME (Measure) ➤ HIV 1 + 2 ANTIBODY (Measure) ➤ HEP B TESTS (Measure) ➤ HEP B SURFACE ANTIBODY (Measure) ➤ HEP B CORE ANTI BODY (Measure) ➤ HEPATITIS A ANTIBODIES (Measure) ➤ PNEUMOCOCCAL VACCINE (Medication) ➤ INFLUENZA VACCINE (Medication) ➤ HEPATITIS A VACCINE (Medication) ➤ HEPATITIS B VACCINE (Medication) ➤ HEP C ASSESSMENT (Consult)

PRECONDITION	SCREENING ELEMENTS
HTN (Health Issue)	<p>If resolve date</p> <ul style="list-style-type: none"> ➤ State it <p>Else</p> <ul style="list-style-type: none"> ➤ SERUM CREATININE (Measure) ➤ FASTING GLUCOSE (Measure) ➤ GFR (Measure) ➤ BP (Measure) ➤ CHOLESTEROL/HDL RATIO (Measure) ➤ SERUM CHOLESTEROL (Measure) ➤ HDL (Measure) ➤ LDL (Measure) ➤ TRIGLYCERIDES (Measure) ➤ UALB/CR (Measure) ➤ CIGARETTES SMOKED PACKS PER DAY (Measure) ➤ PHYSICAL ACTIVITY MINUTES PER WEEK (Measure) ➤ ALCOHOL CONSUMPTION (Measure) <p>if > 29 and < 75 Then</p> <ul style="list-style-type: none"> ○ FRAMINGHAM CARDIAC RISK (Measure)
COPD (Health Issue)	<p>If resolve date</p> <ul style="list-style-type: none"> ➤ State it <p>Else</p> <ul style="list-style-type: none"> ➤ SPIROMETRY (Measure) ➤ FEV1%POST (Measure) ➤ FEV1/FVCPO (Measure) ➤ WEIGHT (Measure) ➤ HEIGHT (Measure) ➤ CIGARETTES SMOKED PACKS PER DAY (Measure) ➤ PHYSICAL ACTIVITY MINUTES PER WEEK (Measure) ➤ PNEUMOCOCCAL VACCINE (Medication) ➤ INFLUENZA VACCINE (Medication)
ASTHMA (Health Issue)	<p>If resolve date</p> <ul style="list-style-type: none"> ➤ State it <p>Else</p> <ul style="list-style-type: none"> ➤ SPIROMETRY (Measure) ➤ PEAK EXPIRATORY FLOW (Measure) ➤ Peak Flow Zenith - calculated based on Peak Flow ➤ Predicted Peak Flow Can't be Calculated (req Peak Flow) ➤ FEV1PREB (Measure) ➤ FEV1%POST (Measure) ➤ CIGARETTES SMOKED PACKS PER DAY (Measure) ➤ PNEUMOCOCCAL VACCINE (Medication) ➤ INFLUENZA VACCINE (Medication)

PRECONDITION	SCREENING ELEMENTS
CKD (Health Issue)	<p>If resolve date</p> <ul style="list-style-type: none"> ➤ State it <p>Else</p> <ul style="list-style-type: none"> ➤ BP (Measure) ➤ WEIGHT (Measure) ➤ HEIGHT (Measure) ➤ GFR (Measure) ➤ UALB/CR (Measure) ➤ LDL (Measure) ➤ HDL (Measure) ➤ SERUM CHOLESTEROL (Measure) ➤ CHOLESTEROL/HDL RATIO (Measure) ➤ HEMOGLOBIN (Measure) ➤ IRON SATURATION (Measure) ➤ SERUM CALCIUM (Measure) ➤ PO4 (Measure) ➤ IPTH (Measure) ➤ PNEUMOCOCCAL VACCINE (Medication) ➤ INFLUENZA VACCINE (Medication) ➤ HEP B VACCINE (Medication) ➤ RENAL IMAGING (Image) ➤ NEPHROLOGY ASSESSMENT (Consult)
CHF (Health Issue)	<p>If resolve date</p> <ul style="list-style-type: none"> ➤ State it <p>Else</p> <ul style="list-style-type: none"> ➤ SERUM CREATININE (Measure) ➤ SERUM SODIUM (Measure) ➤ SERUM POTASSIUM (Measure) ➤ PRO BNP (Measure) ➤ NYHA CLASS (Measure) ➤ CARDIAC EJECTION FRACTION (Measure) ➤ BP (Measure) ➤ Weight (Measure) ➤ CHEST IMAGING (Image) ➤ PNEUMOCOCCAL VACCINE (Medication) ➤ INFLUENZA VACCINE (Medication)