



## Diabetes Toolset: Supporting the Guidelines

- Hello and welcome to the learning series for eDOCSNL Practice 360: Diabetes **Smart Tools for Care.**
- Practice 360 is an ongoing eDOCSNL initiative designed to increase clinical value and practice efficiencies in the Med Access EMR for users in Newfoundland and Labrador. The diabetes tools you will see today are the first of many chronic disease management tools that will be developed by the program in the coming months.
- eDOCSNL has partnered with Diabetes Canada and provincial advisory groups on the development of an EMR toolset **that aligns to the National Diabetes Clinical Practice Guidelines. This is a first of its kind initiative that Newfoundland and Labrador and our care providers are leading**
- In this presentation we will introduce the components of the toolset and give you some idea as to why you might want to use them for the care and monitoring of the people with diabetes or pre-diabetes in your practice.
- Please keep in mind that all screenshots seen in this presentation are taken from a test system, so the content may not exactly reflect what you see in your own EMR but be assured the final product will be supported with all the necessary information to ensure you have absolute clarity and knowledge on how to use the toolset effectively in your practice.

- The Practice 360 Diabetes toolset is a package of guidelines-based tools comprised of:
  - A visit documentation template
  - A care plan
  - A practice management reporting dashboard
- The three items are mutually reinforcing and enable easy guidelines-based care and monitoring

The screenshot displays the Practice 360 Diabetes toolset interface. The top section is a 'Visit' form for patient 'Martina Kennedy' on 2021-01-21. It includes fields for 'Subjective', 'Assessment', and 'Plan'. The 'Assessment' section shows a list of diagnoses, including 'eDOCSNL Diabetes Care Plan'. The 'Plan' section shows a list of care plans, including 'eDOCSNL Diabetes Care Plan'. Below the visit form is a 'Practice Management Reporting Dashboard' with various charts and tables. The dashboard includes a 'Diabetes Prevalence' chart, a 'Diabetes Population by Age & Gender' bar chart, and several tables for 'DM: A1C Outdated (within 6 mos) or no result', 'DM: Last A1C > 7.0%', 'DM: Urine Protein Testing Overdue', 'DM: Annual Foot Exam Overdue', 'DM: Active Medications', 'DM: Vaccinations Overdue', 'DM: Pneumococcal Vaccine Overdue', 'DM: With Elevated BP in the Last Year', and 'DM: Less than 2 Visits in Last 12 Months'.

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ELECTRONIC MEDICAL RECORD

The practice 360 Diabetes toolset is comprised of three main elements: a visit documentation template, a care plan and a practice management reporting dashboard.

We will explore each of these in brief in the following slides and in more detail in other videos in this series.

The elements of this intuitive toolset are mutually reinforcing and facilitate the monitoring and delivery of guidelines-based care of your diabetic patients using advanced features of the Med Access solution.




## ABCDEs of diabetes care

2020

	GUIDELINE TARGET (or personalized goal)
<b>A</b> A1C targets	A1C $\leq 7.0\%$ (or $\leq 6.5\%$ to ↓ risk of CKD and retinopathy) If on insulin or insulin secretagogue, assess for hypoglycemia and ensure driving safety
<b>B</b> BP targets	BP $< 130/80$ mmHg If on treatment, assess for risk of falls
<b>C</b> Cholesterol targets	LDL-C $< 2.0$ mmol/L (or $> 50\%$ reduction from baseline)
<b>D</b> Drugs for CV and/or Cardiorenal protection	(non-AHA) • ACEi/ARB (if CVD, age $\geq 55$ with risk factors, OR diabetes complications) • Statin (if CVD, age $\geq 40$ for type 2, OR diabetes complications) • ASA (if CVD) (Antihyperglycemic Agents) • SGLT2i/GLP1RA with demonstrated cardiorenal benefits in high risk type 2 with ASCVD, CHF or CVD or $> 60$ years with 2 CV risk factors
<b>E</b> Exercise goals and healthy eating	• 150 minutes of moderate to vigorous aerobic activity/ week and resistance exercises 2-3 times/week • Follow healthy dietary pattern (eg Mediterranean diet, low glycemic index)
<b>S</b> Screening for complications	• Cardiac: ECG every 3-5 years if age $> 40$ OR diabetes complications • Foot: Monofilament/Vibration yearly or more if abnormal • Kidney: Test eGFR and ACR yearly, or more if abnormal • Retinopathy: type 1 - annually; type 2 - q1-2 yrs
<b>S</b> Smoking cessation	If smoker: Ask permission to give advice, arrange therapy and provide support
<b>S</b> Self-management, stress, other barriers	• Set personalized goals (see "individualized goal setting" panel) • Assess for stress, mental health and financial or other concerns that might be barriers to achieving goals

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The Practice 360 Diabetes tools support the ABCDES of Diabetes Canada's clinical practice guidelines by providing documentation, clinical decision support and education for all the critical elements of the guidelines identified by diabetes Canada.

<b>A A1C targets</b> A1C $\leq 7.0\%$ (or $\leq 6.5\%$ to ↓ risk of CKD and retinopathy) If on insulin or insulin secretagogue, assess for hypoglycemia and ensure driving safety	
<b>Visit Template</b>	<b>Dashboard</b>
<b>HbA1c/TOTAL HEMOGLOBIN 7.5</b>	<b>DM: A1C Outdated (&gt;than 6 mos) or no Result</b>
Hypoglycemic episodes reported <input checked="" type="radio"/> Yes <input type="radio"/> No Hypoglycemic episode details Has patient experienced severe hypoglycemia? <input type="radio"/> Yes <input type="radio"/> No Hypoglycemic episodes per week Hypoglycemia patient handout <a href="#">Patient Education: Hypoglycemia</a>	<b>DM: Last A1C &gt; 7.0%</b>
 <b>This patient has multiple A1c readings over 7.0, consider med adjustment</b>	
 <b>Hypoglycemic episodes reported by this diabetic patient, consider adjusting medications</b>	
 <b>eDOCSNL</b> ELECTRONIC MEDICAL RECORD	

A1c targets are reinforced at the patient level by the visit template which increases visibility into the current and historical A1c values for the current patient and alerts providers when the patient has poor A1c control.

The care plan and associated goals allow the provider a similar quick-glance visibility of A1c status and alerts when values are outside of normal range or overdue for measurement according to best practice guidelines.

The reporting dashboard provides a population level overview of patients whose A1c falls outside normal values or outside the acceptable measurement interval as determined by the Diabetes Canada guidelines.

**A**

**A1C targets**  
A1C ≤7.0% (or ≤6.5% to ↓ risk of CKD and retinopathy)  
If on insulin or insulin secretagogue, assess for hypoglycemia and ensure driving safety

**Care Plan**

☒ **Labs**

**Active Requests**

		Date	Test Group Name	Description
<input checked="" type="checkbox"/>		18Jun21 02:15 PM	*eDOCSNL q3 Monthly HbA1c	Lab, Diabetes Labs 3 Months, q3 Monthly HbA1c, *eDOCSNL q3 Monthly HbA1c
<input checked="" type="checkbox"/>		18Jun21 02:15 PM	*eDOCSNL Diabetic Annual Labs	Lab, Diabetes Lab Annual, Annual Diabetic Labs, *eDOCSNL Diabetic Annual Labs

**Goals**

**Active Goals**

Goal Name	Last Date	Last Value	Next Due
HbA...	03Sep2020	7.5	Overdue

ELECTRONIC MEDICAL RECORD

A1c targets are reinforced at the patient level by the visit template which increases visibility into the current and historical A1c values for the current patient and alerts providers when the patient has poor A1c control.

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The reporting dashboard provides a population level overview of patients whose A1c falls outside normal values or outside the acceptable measurement interval as determined by the Diabetes Canada guidelines.

**B**

**BP targets**

BP <130/80 mmHg  
 If on treatment, assess for risk of falls

Visit Template

Dashboard

**Blood Pressure**  

↓ +

BP

mm Hg

**DM with Elevated BP in the Last Year**

**Care Plan**

**Goals**

**Active Goals**

🔍 Ophthalmol...		Overdue	👤
🔍 HbA1c/TOTA...	8.5	Overdue	👤
🔍 BP diastolic	70	30Mar2022	👤
🔍 BP systolic	180	04Jun2022	👤

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The visit template allows for multiple blood pressure readings in a single visit if required, as well as allowing visibility into the historical BP values for the current patient.

The reporting dashboard provides a population level overview of diabetic patients with elevated blood pressure measurements in the last year.

C

Cholesterol targets

LDL-C <2.0 mmol/L (or >50 % reduction from baseline)

Visit Template

CHOLESTEROL IN LDL

2.5

[Click here to complete Framingham Risk Score](#)

?

Statin

ACEI/ARB

Antiplatelet Agent

Consider candidacy for SGLT

CV Medication Adherence/Comments

Indicated Continue

Indicated Start

No - not appropriate

No - not tolerated

No - Pt. refused

No - unable to afford

Recommended

Statin therapy

should be used to reduce CV risk in adults with type 1 or type 2 diabetes with any of the following features:

1. Clinical CVD

2. Age>40 Years

3. Age<40 years and 1 of the following:

• Diabetes duration>15 years and age>30 years

• Microvascular complications

eDOCSNL

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LDL targets are reinforced at the patient level by the visit template which increases visibility into the current and historical LDL values for the current .

The care plan and associated goals allow the provider a similar quick-glance visibility of LDL status and alerts when values are outside of normal range or overdue for measurement according to beat practice guidelines.

The reporting dashboard provides a population level overview of patients whose LDL falls outside normal values as determined by the Diabetes Canada guidelines.

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C **Cholesterol targets** | LDL-C <2.0 mmol/L (or >50 % reduction from baseline)

Dashboard

Care Plan

DM with Comorbidities

eDOCSNL DM with CAD   eDOCSNL DM with CVD

eDOCSNL DM with Hyperlipidemia

Goals

**Active Goals**  

Goal Name	Last Date	Last Value	Next Due
LDL Chol...	13Jun2018	1.8	Overdue

✓ Labs

**Active Requests**

	Date	Test Group Name	Description
✓	18Jun21 02:15 PM	*eDOCSNL q3 Monthly HbA1c	Lab, Diabetes Labs 3 Months, q3 Monthly HbA1c, *eDOCSNL q3 Monthly HbA1c
✓	18Jun21 02:15 PM	*eDOCSNL Diabetic Annual Labs	Lab, Diabetes Lab Annual, Annual Diabetic Labs, *eDOCSNL Diabetic Annual Labs

ELECTRONIC MEDICAL RECORD

LDL targets are reinforced at the patient level by the visit template which increases visibility into the current and historical LDL values for the current .

The care plan and associated goals allow the provider a similar quick-glance visibility of LDL status and alerts when values are outside of normal range or overdue for measurement according to beat practice guidelines.

The reporting dashboard provides a population level overview of patients whose LDL falls outside normal values as determined by the Diabetes Canada guidelines.



<b>D</b>	<b>Drugs for CV and/or Cardiorenal protection</b>	(non-AHA) • ACEI/ARB (if CVD, age ≥55 with risk factors, OR diabetes complications) • Statin (if CVD, age ≥40 for type 2, OR diabetes complications) • ASA (if CVD) (Antihyperglycemic Agents) • SGLT2i/GLP1RA with demonstrated cardiorenal benefits in high risk type 2 with ASCVD, CHF or CVD or >60 years with 2 CV risk factors

**Visit Template**

**Dashboard**

Statin No - not appropriate   
 ACEI/ARB Indicated: Start   
 Antiplatelet Agent ☐ Not indicated ☐ Yes

Patients are considered **at risk for CVD** if any of the following apply:
 

1. Age >40 years
2. Duration of Diabetes >15 years and age >30 years
3. End organ damage (microvascular, CV)
4. One or more CVD risk factor(s) (current smoking, hypertension, family history of premature CVD in first degree relative (men <55 years, women <65 years), CKD, obesity (BMI >30 kg/m<sup>2</sup>), erectile dysfunction)
5. Age >40 years and planning to undertake very rigorous or prolonged exercise, such as competitive running, long distance running, or high-intensity interval training.

[Click here for Special Authorization for SGLT-2/GLP-1](#)   
[Click here for Special Authorization for Oral Glycemic Agents in Patients with Type 2 Diabetes and High CVD risk](#)

**DM Active Medications**

eDOCSNL DM 0 Active Rx    eDOCSNL DM 1-9 Active Rx  
 eDOCSNL DM 10+ Active Rx

The eDOCSNL Diabetes visit template highlights CV risk and reminds providers to consider the best practice guidelines for medical management of diabetes. The template also provides easy access to the necessary special authorization form for drug coverage for glycemic agents indicated for high CV risk patients. The reporting dashboard provides a population level overview of medical management for the provider’s diabetic population.

<b>E</b>	<b>Exercise goals and healthy eating</b>	<ul style="list-style-type: none"> <li>• 150 minutes of moderate to vigorous aerobic activity/ week and resistance exercises 2-3 times/week</li> <li>• Follow healthy dietary pattern (eg Mediterranean diet, low glycemic index)</li> </ul>
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Visit Template

Nutrition / Diet review ☐ No ☐ Yes

Nutrition Score 1. Follows as recd ▾

Nutrition Notes

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Socioeconomic Obstacles to Guidelines-based Care ☐ No ☐ Yes

Patient referred to dietician? ☐ No ☐ Yes


Physical Activity ☐ No ☐ Yes

Exercise Score 4. Able but no atte ▾

Physical Activity Notes

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Obstacles to exercise 3. Lifestyle choice ▾



The diabetes visit template encourages physicians to review exercise and nutrition with patients.

There is an extensive reference library attached to the template as well with many educational resources for patients, including materials on the topic of lifestyle choices and management of diabetes.

The care plan encourages referral to Diabetes management programs which educate patients and promote a healthy lifestyle supportive of best practice management of diabetes.

**S** Screening for complications

- Cardiac: ECG every 3-5 years if age >40 OR diabetes complications
- Foot: Monofilament/Vibration yearly or more if abnormal
- Kidney: Test eGFR and ACR yearly, or more if abnormal
- Retinopathy: type 1 - annually; type 2 - q1-2 yrs

Visit Template

Dashboard

No ECG recorded in this patient's chart in the last 5 years

eGFR

CREATININE

HbA1c/TOTAL HEMOGLOBIN 7.9

MICROALBUMIN/CREATININE;URINE 30

Diabetic Nephropathy ☐ No ☐ Yes

Diabetic Retinopathy ☐ No ☐ Yes

Diabetic Neuropathy ☐ No ☐ Yes

This diabetic patient has not had a foot exam in the last 12 months

Click here to complete Diabetic Foot Exam

Diabetic Foot Exam Video [Diabetic Foot Exam Video](#)

DM Chronic Kidney Disease

eDOCSNL DM Urine Protein Testing Overdue

eDOCSNL DM eGFR Testing Overdue

DM: Annual Foot Exam Overdue

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Screening for complications is one of the strengths of the eDOCSNL Practice 360 diabetes tools.

There are several clinical decision support triggers built into the template specific to screening for diabetic complications, including CV risk and diabetic neuropathy.

As a compliment to these alerts, the tools and educational resources to manage the patient are built directly into the template as well as the opportunity to directly add diagnoses to the patients medical profile, which can enable further software functionality and is data that is necessary to populate the reporting dashboard.

The goals activated through the eDOCSNL Diabetes care plan also support the at-a-glance assessment of progress with monitoring patients for complications and visual reminders of overdue notices for these screening elements.

Finally, the diabetes reporting dashboard provides a population-level view of information relevant to the complications of diabetes in your diabetic patient population.

**S**

**Screening for complications**

- Cardiac: ECG every 3-5 years if age >40 OR diabetes complications
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**Care Plan**

**Labs**

**Active Requests**

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<input checked="" type="checkbox"/>		18Jun21 02:15 PM	*eDOCSNL Diabetic Annual Labs	Lab, Diabetes Lab Annual, Annual Diabetic Labs, *eDOCSNL Diabetic Annual Labs

☒ 18Jun21 Normal

Ophthalmologist Consult, Ophthalmologist, Diabetes Ophthalmology Referral

**Goals**

**Active Goals**

Goal Name	Last Date	Last Value	Next Due
Ophthalmologist	03Mar2020		Overdue
Diabetic Foot Exam Completed	12Jun2020	Yes	12Jun2021
MICROALBUMIN/CREATININE;...	12Jun2020	30	12Jun2021

**DOCSNL**  
ELECTRONIC MEDICAL RECORD

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S

Smoking cessation

If smoker: Ask permission to give advice, arrange therapy and provide support

Visit Template

Review of Smoking [Show](#)

Status

Smoking status

Quit Date

Pack Year Calculator [Pack Year Calculator](#)

Pack Years

Smoking Cessation Advice

Cessation Aid Discussed ☐ Yes ☐ No

Quit Now [Quit Now](#)

Quit Now info provided ☐

Smoking Cessation Reference: [Effects of Stopping Smoking on FEV1](#)

[Create Consult to Smokers Helpline](#)

Smoker's Helpline Weblink [Smoker's Helpline Website](#)

Dashboard

DM Smoking Status

eDOCSNL DM Currently Smoking

eDOCSNL DM Smoking Status Not Recorded in Profile

Current: 46%

Rest of \*eDOCSNL DM Population: 54.2%

eDOCSNL DM Currently Smoking: 45.8%

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Providers are prompted to discuss smoking status and provide smoking cessation advice, with embedded tools to support the patient with existing services. The diabetes reporting dashboard alerts providers to the proportion of and identity of their diabetic patients who smoke and also highlights diabetic patients for whom the provider has not reviewed smoking status. You can't manage what you aren't aware of!

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<b>S</b>	<b>Self-management, stress, other barriers</b>	<ul style="list-style-type: none"> <li>• Set personalized goals (see "individualized goal setting" panel)</li> <li>• Assess for stress, mental health and financial or other concerns that might be barriers to achieving goals</li> </ul>
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### Visit Template

Screened for Depression, anxiety, other Stressors ☐ No ☐ Yes

[Click here to complete PHQ-9](#)

PHQ-9 Question 1 Score

[Click here to complete GAD-7](#)

GAD-7 Question 1

Referred to mental health and addictions services? ☐ No ☐ Yes

Foot care handout [Patient Education: foot care](#)

Hypoglycemia handout [Patient Education: Hypoglycemia](#)

DC guidelines [Diabetes Canada Guidelines](#)

DC quick reference [Diabetes Canada quick reference guide](#)

Gestational Diabetes handout [Patient Education: Gestational Diabetes](#)

Childhood Diabetes handout [Patient Education: Childhood Diabetes](#)

Diabetes Canada Resources [Patient Resources](#)

Managing yourself when you are sick ☐ No ☐ Yes ☐ Not Applicable

Patient Handout [Patient self management handout](#)

Women – ☐ No ☐ Yes ☐ Not Applicable

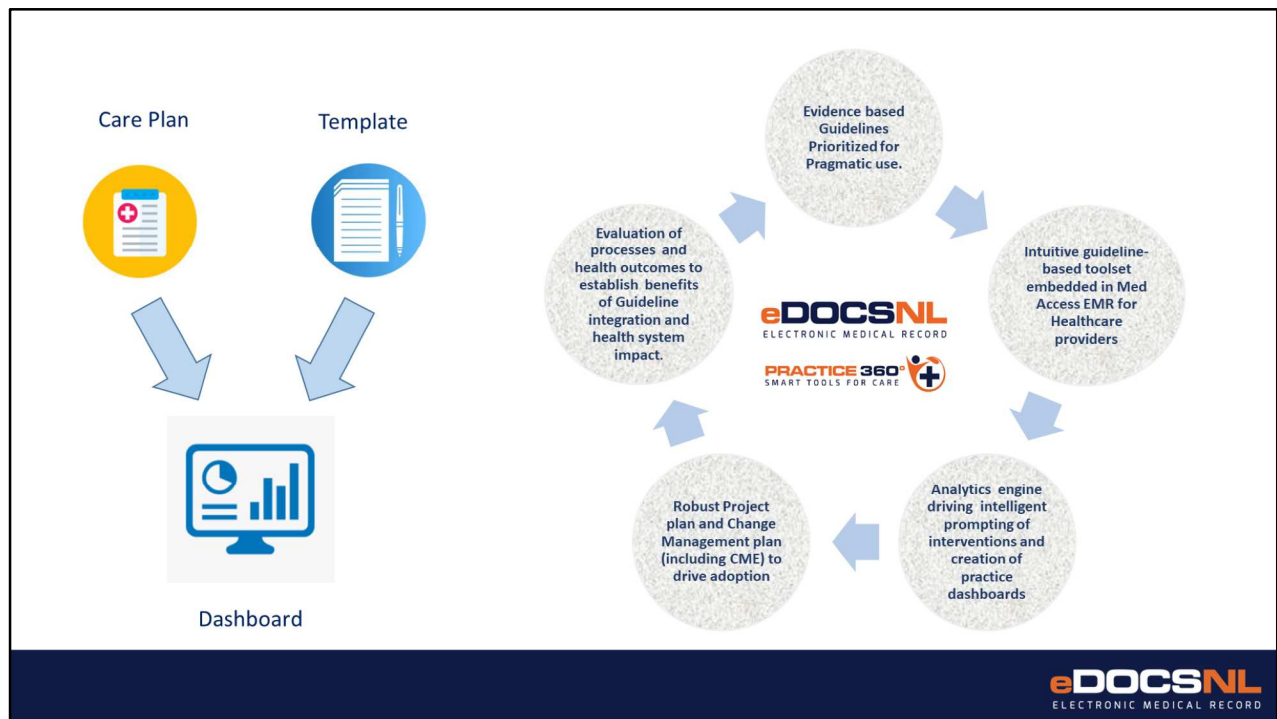
Contraception/Preconception Planning Discussed

Driving Guidelines Reviewed ☐ No ☐ Yes ☐ Not Applicable

Patient goals / self-management

Resources given to patient ☐ No ☐ Yes

Using the eDOCSNL tools, patients are empowered for self-management. Providers are prompted to review mental health status, with associated scoring tools, and discuss self management with the patient. The extensive resource library attached to the visit template supports patient education and self-management.



The components of the toolset are mutually reinforcing and address the ABCDES of guidelines-driven diabetes care.

The documentation template provides all the information to make point of care decisions while automating normally manual tasks, standardizes data input so that the software can enable other features providing clinical value and supports the creation of a data set for providers that can inform population level management. The care plan populates chart information, patient goals and tasks in an efficient way that makes ongoing guidelines-based care and monitoring seamless.

The data generated by standardized documentation supported by the patient level tools and visit template informs the diabetes dashboard and gives providers a population-level view of diabetes in their practice.

This aligns with the eDOCSNL Practice 360 approach of using the intelligent and standardized features of the EMR to support and evaluate guidelines based care, presenting providers with the information they need for best practice decision making. Data provided by the EMR through the Practice 360 tools will enable the evaluation and refinement of guidelines and supports health system changes that will benefit the diabetic patients of Newfoundland and Labrador.

## Thank You

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ELECTRONIC MEDICAL RECORD

**PRACTICE 360°**  
SMART TOOLS FOR CARE



Newfoundland  
Labrador

- Thank you for viewing this presentation on the Practice 360: Diabetes Toolset, a collaborative initiative of eDOCSNL and Diabetes Canada
- For more detail on each component of the toolset and for information on how to prepare your EMR instance to fully utilize the tools, please review the remainder of the presentation series which can be found on the eDOCSNL website at [eDOCSNL.ca](http://eDOCSNL.ca) under the Practice 360 tab.