Let's Talk Informatics

The Drug Information System in Clinical Practice

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Please be advised that we are currently in a controlled vendor environment for the
One Person One Record project.

Please refrain from questions or discussion related to the
One Person One Record project.

Informatics…

utilizes health information and health care technology to enable patients to receive best treatment and best outcome possible.

Clinical Informatics…

is the application of informatics and information technology to deliver health care.

AMIA. (2017, January 13). Retrieved from https://www.amia.org/applications-infomatics/clinical-informatics

Objectives

At the conclusion of this activity, participants will be able to...

- Identify what knowledge and skills health care providers will need to use information now and in the future.
- Prepare health care providers by introducing them to concepts and local experiences in Informatics.
- Acquire knowledge to remain current with new trends, terminology , studies, data and breaking news.
- Cooperate with a network of colleagues establishing connections and leaders that will provide assistance and advice for business issues, as well as for best-practice and knowledge sharing.

Session Objectives

- Introduce the Drug Information System (DIS) and its purpose
- Increase awareness of the clinical information available in the Drug Information System
- Increase understanding of how DIS information can be applied in practice
- Explain how health care providers can access the DIS
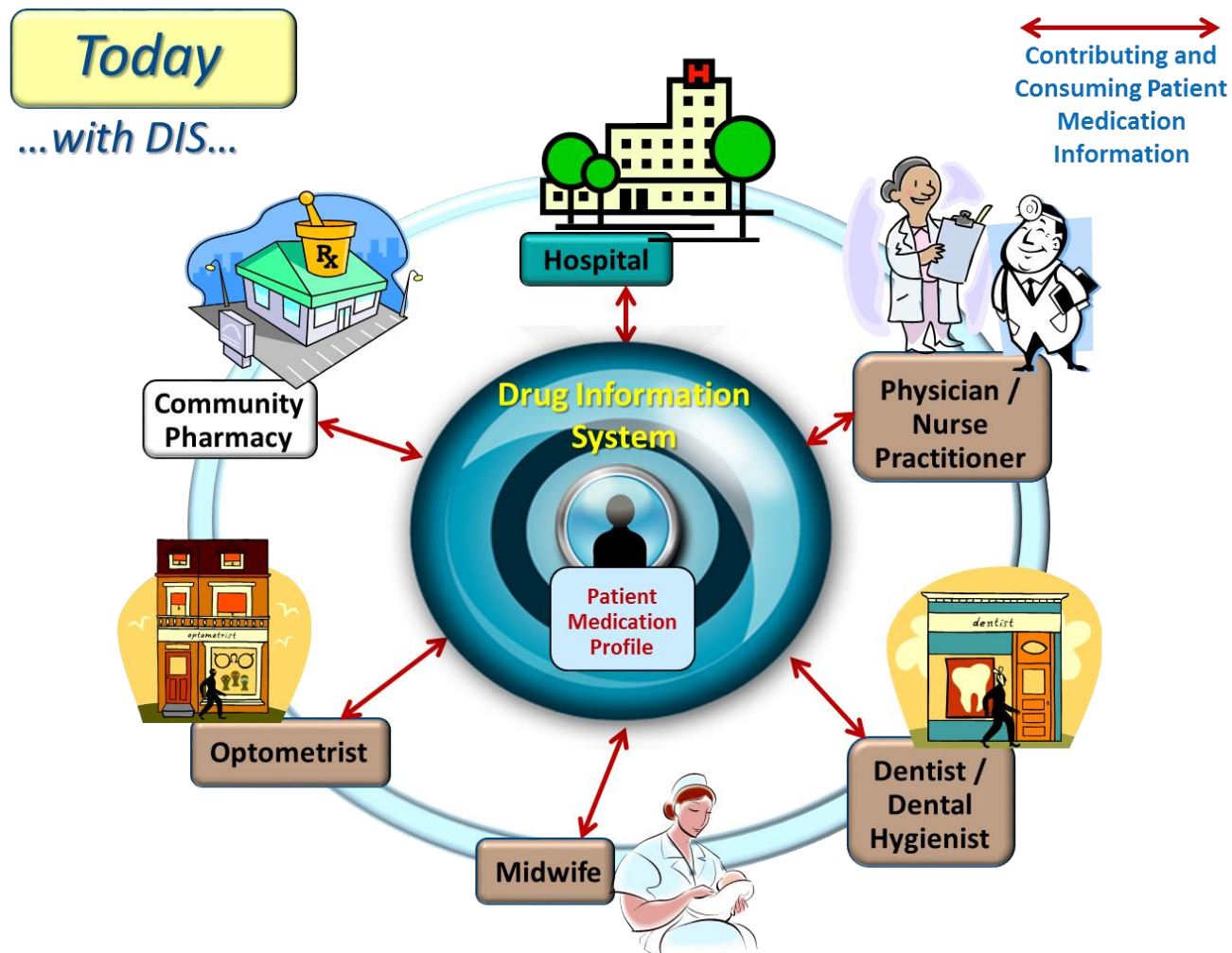- Provide an update on DIS progress

Conflict of Interest Declaration

- We do not have an affiliation (financial or otherwise) with a pharmaceutical, medical device, health care informatics organization, or other for-profit funder of this program.

What is the Drug Information System?
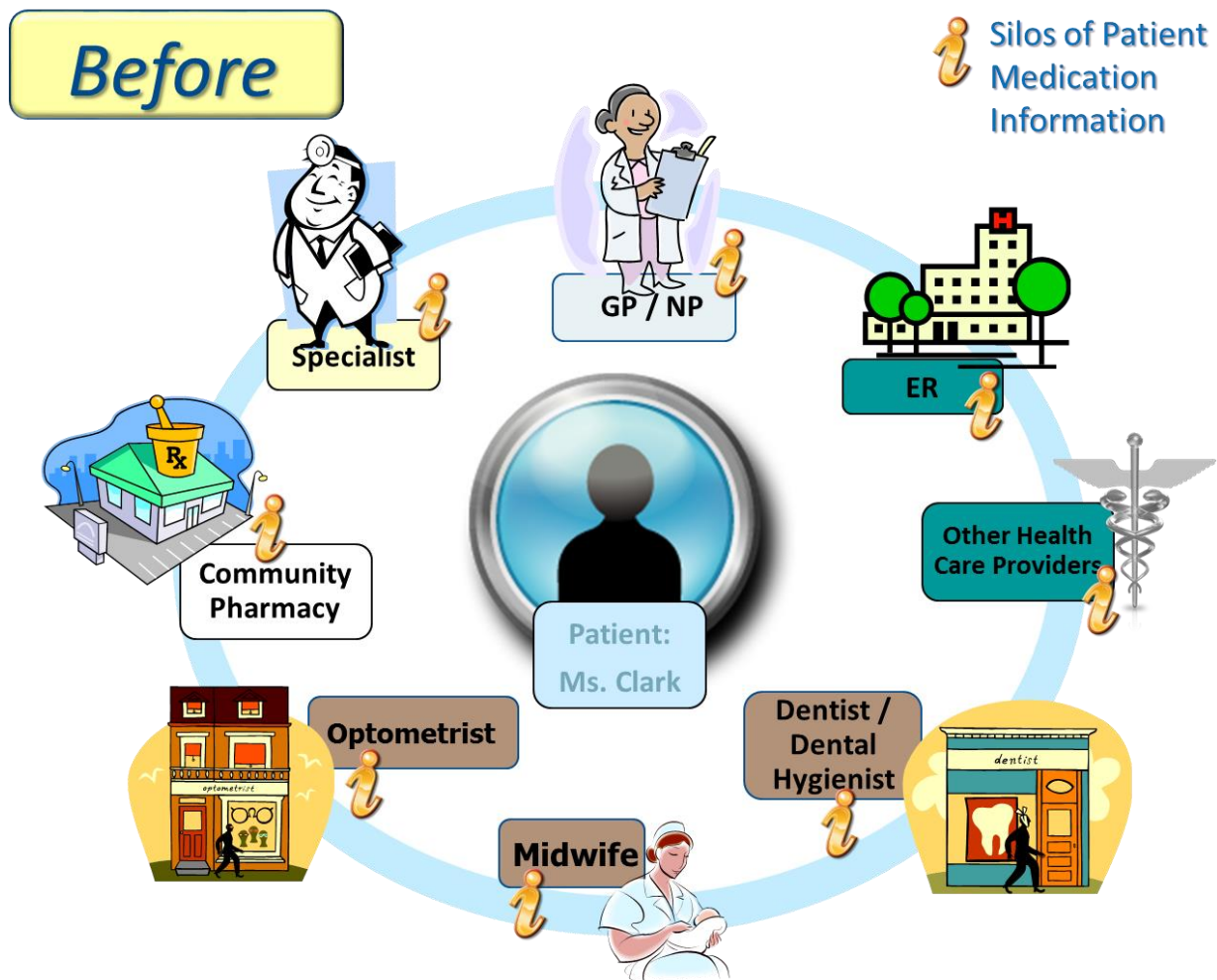
What is the Drug Information System?

What is the Drug Information System?

Objective of the DIS:

- Facilitates secure electronic exchange of medication information
- Provide more complete information to health care providers in a single system with multiple points of access
- To ensure patient safety by reducing and/or eliminating drug related adverse events
- Supports existing Medication Reconciliation processes
- Enables the creation of electronic prescriptions (e-Prescribing)
- The DIS Program is the responsibility of DHW, with clinical application support provided by NSHA IM/IT

Information for Clinical Practice

- The DIS medication profile automatically includes:
  - Prescriptions dispensed by community pharmacies
  - e-Prescriptions for drugs and devices
- If entered by a healthcare provider*, the medication profile may also include:
  - Other Medications (e.g., OTCs, Drug Samples, Natural Products)
  - Allergies & Intolerances
  - Adverse Drug Reactions
  - Immunizations
  - Medical Conditions
  - Patient Observations
  - Patient Notes
  - Pharmacy Professional Services (e.g., smoking cessation) – entered by community pharmacies only

> *** Dispensary staff in community pharmacies and healthcare providers Portal with access to the DIS**

How does the DIS work?

- The DIS is integrated pharmacy software to automatically capture all drug dispenses in real-time.
  - There are over 300 pharmacies in Nova Scotia and all are connected to the DIS
- Outside pharmacies, health care providers and their support staff can view and/or update information in the DIS through two web-based portals: the **DIS Portal** and the **SHARE Clinical Portal**.

Accessing the DIS

...in hospital, healthcare providers access the DIS through either the SHARE Clinical Portal or the DIS Portal...

- SHARE Clinical Portal
  - A new tab called Community Med Profile with 'view-only' access to the medication profile
- DIS Portal
  - Web based and allows prescribers to add to or update information in a patient's medication profile
  - Enables the creation of e-prescriptions
- To get access:
  - Prescribers (physicians, nurse practitioners, pharmacists, etc.) are eligible for access to the SHARE and DIS Portals.
  - Non-prescriber roles access the DIS via the Community Med tab in SHARE.
  - Provincial SHARE Coordinators are available to assist users looking for DIS and/or SHARE access

E-Prescribing

- e-Prescriptions can be submitted by authorized prescribers through the **DIS Portal**
  - **True electronic transmission with no paper**
- e-Prescriptions through the DIS are the only form of e-prescription authorized by the NS College of Pharmacists
- The patient can fill the prescription at any community pharmacy in Nova Scotia
- The NS PMP Board has approved the use of e-prescribing through the DIS Portal for monitored drugs
  - **No duplicate PMP pad required**

Practice Applications

- **Drug Utilization Review** (DUR) is also performed by the DIS
  - DUR alerts display at time of dispense by pharmacies
  - DUR alerts also display for **e-prescriptions** at time of prescribing
  - Prescribers can also do a pre-determination to see if there are interactions with a drug prior to issuing a prescription

Practice Applications

- The DIS provides information to support **medication reconciliation**
  - Complete, detailed information on current medications is available from the DIS
    - **Do not have to contact each individual pharmacy**
  - Reports are available that can be printed and reviewed to support Med Rec
  - Working with the NSHA and IWK on a separate, approved report

Practice Applications

Existing DIS Medication Reconciliation Report

Practice Applications

DIS Medication Profile Report

Medication Profile
For: JEFFERIES, DIS CARTER
Date of Birth: 1934-09-07 Gender: Male
Date range: 2017-08-08 - 2018-02-08
Identifier: 8060110007 NS-HCN

Search Criteria:
Devices Included: No
Duplicates Removed: No
Current Only: No

This report is confidential.

It is intended solely for the health care providers within the patient's circle of care. Any other distribution, disclosure or copy is strictly prohibited.
If you received this report in error, please notify the Department of Health and Wellness - Privacy & Access Office immediately and destroy this report without reading or copying it.
Please note that changes MAY have been made to the patient's medication records in the Nova Scotia Drug Information System since this report was printed.
Depending on the criteria selected to generate this report, it includes either: the patient's current medications and devices records or all of the patient's medications and devices records contained in the Nova Scotia Drug Information System for the period selected.
The information included in this report should be discussed with your patient to validate its accuracy and to ensure the best possible medication history is obtained.

Prescriptions

Drug Name	Prescribed Date	Last Pick Up Date	Remaining Quantity	Last Quantity Picked Up	Prescribed By	Status	Issues	Notes
Fluzone Trivalent Subviron 45mcg/0.5ml	2017-10-18	2017-10-18	0	.5	Jesse James	Completed	No	Yes
SIG: INJECT AS DIRECTED								
ATORVASTATIN 10 MG SWALLOW, ORAL	2017-10-18	2017-10-18	360	30	Jesse James	Active	No	No
SIG: TAKE ONCE DAILY								
APO-HYDROMORPHONE 1 MG SWALLOW, ORAL	2017-06-06	2017-10-18	112	112	Jesse James	Active	Yes	No
SIG: TAKE 1 TABLET(S) EVERY 3 - 4 HOURS. AS NEEDED								
DILAUDID 1 MG SWALLOW, ORAL	2017-06-05	2017-06-06	252	63	Angela McGee	Active	Yes	Yes
SIG: TAKE 1 TABLET(S) EVERY 3 - 4 HOURS AS NEEDED. FOR BREAKTHROUGH PAIN								
HYDROMORPH CONTIN 24 MG SWALLOW, ORAL	2017-06-05	2017-06-06	180	60	Angela McGee	Active	Yes	No
SIG: TAKE 1 CAPSULE(S) TWICE A DAY.								
COUMADIN 1 MG SWALLOW, ORAL	2016-11-22	2017-06-06	30	30	Angela McGee	Active	Yes	No
SIG: TAKE 1 TABLET(S) ONCE A DAY.								
APO-RABEPRAZOLE 20 MG SWALLOW, ORAL	2016-11-15	2017-10-18	0	60	Jennifer Sweetapple	Completed	No	No
SIG: TAKE 1 TABLET TWICE A DAY								
APO-LORAZEPAM 1 MG SWALLOW, ORAL	2016-10-07	2017-06-06	1	7	Angela McGee	Active	No	No
SIG: TAKE 1 TABLET(S) ONCE A DAY AS NEEDED.								
PMS-DOMPERIDONE 10 MG SWALLOW, ORAL	2015-01-02	-	540 u	-	Physician Default	Active	No	No
SIG: Take 1 tablet three times a day with meals.								

Practice Applications

- The DIS is the sole source of information on drug dispenses for the **NS Prescription Monitoring Program (PMP)**
  - The DIS provides data to the PMP on an hourly basis, but the PMP is still responsible for all monitoring activities
  - The DIS is the source of the information found in eAccess
    - All information in that is in eAccess is in the DIS
  - The DIS sends DUR alerts for potential double-doctoring and duplicate therapy
  - The DIS now facilitates the collection of benzodiazepine dispensing data which is also sent to the PMP
    - Not currently in eAccess

DIS in Clinical Practice At Discharge

- Mr. Smith is being discharged from hospital and has changes to his warfarin, requires INR testing and had an allergic reaction to penicillin
- Using the DIS Portal the prescriber can first review his medication profile

DIS in Clinical Practice At Discharge

Prescriptions (6)

Rx ID	Medication	Prescribed Date	Last Pickup Date	Last Quantity Picked Up	Remaining Quantity	Prescribed By	Issues	Notes
19010	ATORVASTATIN 10 MG SWALLOW, ORAL	2017-10-18	2017-10-18	30 TABLET	360 TABLET	Jesse James	No	No
	TAKE ONCE DAILY							
11006	DILAUDID 2 MG SWALLOW, ORAL	2017-06-06	2017-10-18	112 TABLET	112 TABLET	Jesse James	Yes	No
	Take 1 Tablet(s) every 3 - 4 hours. as needed							
10983	DILAUDID 1 MG SWALLOW, ORAL	2017-06-05	2017-06-06	63 TABLET	252 TABLET	Angela McGee	Yes	Yes
	Take 1 Tablet(s) every 3 - 4 hours as needed. for breakthrough pain							
10982	HYDROMORPH CONTIN 24 MG SWALLOW, ORAL	2017-06-05	2017-06-06	60 12 HOUR EXTENDED RELEASE CAPSULE	180 12 HOUR EXTENDED RELEASE CAPSULE	Angela McGee	Yes	No
	Take 1 Capsule(s) twice a day.							
6041	COUMADIN 1 MG SWALLOW, ORAL	2016-11-22	2017-06-06	30 TABLET	30 TABLET	Angela McGee	Yes	No
	Take 1 Tablet(s) once a day.							
5984	APO-RABEPRAZOLE 20 MG SWALLOW, ORAL	2016-11-15	2017-10-18	60 DELAYED RELEASE TABLET	0	Jennifer Elizabeth Sweetapple	No	No
	TAKE 1 TABLET TWICE A DAY							

Other Medications (1)

Medication	Start Date	End Date	Issues	Notes
ASPIRIN 81 MG SWALLOW, ORAL	2017-07-10	2018-07-09	No	No

Conditions (2)

Condition	Start Date	End Date	Notes
BENIGN HYPERTENSION	2016-09-27		Yes
GASTRO-OESOPHAGEAL REFLUX DISEASE WITHOUT OESOPHAGITIS	2011-10-03		No

Allergies/Intolerances (1)

Substance	Type	Start Date	Severity	Notes
AMOXICILLIN 125 MG ORAL	ALLERGY	2017-12-05	HIGH	Yes

Adverse Reactions (1)

Reaction	Reaction Onset Date	Severity	Notes

Discharge-Add a Penicillin Allergy

Discharge-Abort RX and Add Note

Discharge-Abort RX and Add Note

Discharge-E-prescribe new RX

Discharge-Add Note About Blister Packs

Progress to Date

October 2016 All pharmacies connected to the DIS

37 million dispense records

9,000 e-prescriptions

940,000 patient records

Questions?

Let's Talk Informatics has been certified for continuing education credits by;

- College of Family Physicians of Canada and the Nova Scotia Chapter for 1 Mainpro+ credit.
- Digital Health Canada for 1CE hour for each presentation attended. Attendees can track their continuing education hours through the HIMSS online tracking certification application, which is linked to their HIMSS account.

Thank you for attending this event.