Transforming Pharmacy Practice Today
Sharing how we turned ideas into action at CDHA

CDHA Royal Bank Theatre
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Lisa Nodwell & Kent Toombs
Overview

- CDHA Pharmacy Practice Model Experience
  - Turning Ideas into Action

- CDHA Pharmacy Practice Model Initiatives
  - Clinical Cross Coverage & Clinical Liaison On-Call
  - Decentralized Order Entry & Collaborative Multi-Site Order Entry
  - Technician Order Checking

- Practice Change Evaluation & Staff Feedback

- Questions
Background

Answering the call for healthcare reform ...

...the perfect storm scenario.
“What if we don’t change at all ... and something magical just happens?”

Source: blog.vanillaforums.com
CDHA Pharmacy Practice Model

- Pharmacy Strategic Plan
- Front-line staff & Management co-leads
CDHA Pharmacy Practice Model
Guiding Principles

- Patient focused and evidence-based
  - CSHP 2015
  - 2009/10 Hospital Pharmacy in Canada Survey
- Expanded knowledge and competencies
- Innovative roles
  - Pharmacists integrating clinical and distribution
  - Pharmacy technicians managing drug distribution
  - Interdisciplinary teams
- Safe and efficient drug distribution
- No additional resources
CDHA Pharmacy Practice Model Initiatives

- Clinical
- Collaborative
- Operational
- Research
Clinical Collaborative Operational Research

Decentralized Order Entry

Clinical Cross Coverage: ED/ICU, Vascular/General Surgery, 9L/CHU, MH/VMB, ACC/CCU & DGH

CDHA Pharmacy Practice Model Initiatives

Collaborative Multi-Site Order Entry

Clinical Liaison On-Call

Decentralized Order Entry

Technician Order Checking

A different today. A better tomorrow.
Decentralized Order Entry

Decentralized Order Entry is a model of practice which allows clinical pharmacists to efficiently identify and resolve medication related issues thus improving turnaround time for urgent medications.

Pharmacists provide prioritized clinical activities and enter medication orders from the patient care area.
Clinical Workflow Diagrams

Floor Plan: DGH D41

Recommended space allocation for unit-based PC and dual monitor dedicated to pharmacy decentralized order entry and multidisciplinary use.
Collaborative Multi-Site Order Entry

Collaborative Multi-Site Order Entry is a model of practice created to build capacity to manage unpredictable work volume, to enhance flexibility in staffing and to improve communication.

Pharmacists share order entry from central locations using a merged electronic queue.
Clinical Cross Coverage

Clinical Cross Coverage is a model of practice developed to bridge gaps in clinical consistency created by limitations on scheduling flexibility.

Pharmacists cross-train in a secondary practice area matching intensity of patient care and clinical skill set.
Clinical Cross Coverage
Rationale

1. Patient-centered
2. Enhance team communication and transfer of information
3. Promote collaboration
4. Facilitate decentralized order entry
Clinical Cross Coverage Groups:

- **Critical Care/ED:** ICU(5.2, 3A), ED(HI)
- **Oncology:** Onc Inpatient (8A, 8ASat, 8BMT), Onc Outpt (MDU, NSCC)
- **Cardiology:** CVICU, Cardiology (6.1, 6.2), CCU/ACC
- **End Organ Failure:** MOTP & Nephrology / Renal Dialysis
- **Acute Medicine:** Clinical Teaching Unit (8.2), H3 IMCU
- **Surgery:** General Surgery (9A, 3B, 6B), 6BIM, 6AIM, Vascular Surgery (4.1)
- **Geriatrics/Medicine/MH:** Mental Health, VMB, Hospitalist Medicine Unit (8.4), Progressive Care (9L)
- **DGH & NSH:** ED/ICU/Cardiology/Family Medicine/Surgery/Mental Health
- **ID Clinic:** NP/MD
- **Geriatric Assessment Clinic:** NP/MD
Clinical Activities Checklist
Prioritization Tool

• Core vs. Enhanced activities
• New staff education
• Foundation for current KPI focus
Clinical Pharmacy Practice incorporates the critical analysis of patient-specific healthcare needs with regards to medication and achieving evidence-based improved health outcomes. Clinical pharmacists provide complete, patient-focused care activities as collaborative practitioners in the healthcare team.

Assessment: Review patient history and medication profile, identify and resolve medication-related issues, collaborate to complete Med Rec on admission, transfer and discharge and evaluate laboratory, physical and therapeutic parameters.

Consultation and selection: Team collaboration through participation in patient care rounds and advising the healthcare team on the most appropriate medication therapy with consideration of patient-specific needs, CDHA and provincial Formulary alternatives (i.e., drug plan coverage).

Monitoring and management: Management of dose adjustments required for renal or hepatic dysfunction and age-related changes especially in regards to high risk medications.

Planning: Contributing to the development of a patient care plan, ensuring continuity of care through communication with the patient, caregivers and community-based care and documentation of clinical care in the patient chart and EMR.

Education: Provide patient-specific education regarding new medications, changes to pre-admission medications and discharge medications, provide group education to the interdisciplinary team on health and medication related topics, precept undergraduate and post-graduate learners in Pharmacy and other inter disciplinary professionals.

Clinical Pharmacy Practice Initiatives: Provide comprehensive pain management services as certified Pain Resource Professionals (PRPs), VTE prophylaxis and anticoagulation management, immunization services as certified Immunization and Injection Administration practitioners and diabetic care management.

Sarai Hamedat

Sarai graduated from Memorial University in St. John’s, Newfoundland in 2013 with her Bachelor of Science in Pharmacy then continued to pursue her interest in clinical practice by completing a Residency in Hospital Pharmacy at the Gei Health Science Centre in June 2013. Shortly thereafter, she accepted her current position at CDHA as a Clinical Pharmacist in General Surgery at the VG.

Jaclyn Wakita

Jaclyn completed her Bachelor of Science in Pharmacy at the University of Alberta in 2011 followed by a Residency in Hospital Pharmacy at the University Hospital of Northern British Columbia. Jaclyn joined the pharmacy team at CDHA in July 2012. Her time has focused on General Surgery at the VG but she has also specialized in Geriatrics and has practiced on the Community Health Unit (B-4) at the Ill.

Kelly Foster

Kelly graduated from the Dalhousie College of Pharmacy with her Bachelor of Science in Pharmacy in 2012. She then completed a Residency in Hospital Pharmacy at the Saint John Regional Hospital in New Brunswick in June 2013. Kelly became part of the pharmacy team at CDHA in August 2013 and practices as a Clinical Pharmacist in General Surgery at the VG.

Michael MacNeil

Mike completed his Doctor of Pharmacy at the University of Michigan in 2010. He continued to specialize in clinical practice by completing a Residency in Hospital Pharmacy at the Gei Health Science Centre in June, 2011. Mike began working at CDHA as a Clinical Pharmacist in General Surgery at the VG and has cross-trained to provide clinical care to patients in Vascular Surgery (B-3) at the Ill.
Clinical Liaison On-Call

Clinical Liaison On-Call is a model of practice designed to enable priority, clinical interventions for patients in areas without a scheduled clinical pharmacist.

Pharmacists rotate being on-call to care areas without a pharmacist in addition to their scheduled practice area.
Technician Order Checking

Technician Order Checking is a model of practice created to improve the safety and efficiency of distribution workflow.

Technicians provide a focused, timely final check on all interim medications.
What has been the impact?

• Many overlapping initiatives
CDHA Pharmacy Practice Model Evaluation

- **Clinical Workload Results (2011 vs. 2012)**
  - More clinical pharmacy activities provided to patients

- **Clinical Scheduling Consistency (2011 vs. 2013)**
  - Increase in clinical pharmacist coverage in patient care areas

  **Before:** 88% in 25 areas

  **After:** 93% in 29 areas
CDHA Pharmacy Practice Model Evaluation

Collaborative Multi-Site Order Entry Statistics (May 2013) (Halifax Infirmary and Victoria General Hospital)

- **May 2013 (Weekends):**
  - 612 orders
  - 9,641 Orders
  - Number of Non Multi-Site Orders
  - Number of Multi-Site Orders

- **May 2013 (Nights):**
  - 1,038 orders
  - 27,342 orders
**Medication Turnaround Time**

**Medication Timeline (Minutes)**

- **All Drugs**
  - Time from when Prescriber Writes Orders and Fax to Pharmacy: 88 minutes
  - Time until Pharmacy Processes Order: 23 minutes
  - Time to Prepare Medication in Pharmacy and Administer to Patient: 232 minutes

- **IV Antibiotics Only**
  - Time from when Prescriber Writes Orders and Fax to Pharmacy: 82 minutes
  - Time until Pharmacy Processes Order: 19 minutes
  - Time to Prepare Medication in Pharmacy and Administer to Patient: 195 minutes

**Phase 1 Medication Turnaround Time All Drugs 111 minutes (Apr/13)**

**Phase 1 Medication Turnaround Time All Drugs 143 minutes (June/11)**

Phase 1 - Time from order composition to pharmacy processing.
CDHA Pharmacy Practice Model
Staff Feedback

“[I] believe regulation of technicians will enable expanded services by pharmacists - and confident, knowledgeable technicians.”

- Pharmacist

“…having a pharmacist available on the floor has been very helpful and timesaving.”

- Nurse

“My expanded roles have been extremely satisfying and rewarding.”

- Pharmacy Technician
CDHA Pharmacy Practice Model

Special thanks to all pharmacy staff and the support from collaborative health care teams.
Questions

Further information:

lisa.nodwell@cdha.nshealth.ca
kent.toombs@cdha.nshealth.ca