Exploring a Collaborative National Process to Co-create Consensus Clinical Pharmacy Key Performance Indicators for Ambulatory Oncology Pharmacists

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HANDOUT

Objectives

• After attending and participating in the session, participants will be able to:

1. Outline key milestone steps that could be used by CAPHO to conduct a Delphi consensus process for establishing key performance indicators (cpKPI) for Canadian ambulatory oncology pharmacists.

2. Highlight ideal attribute cpKPI selection criteria that could be adapted for establishing key performance indicators (cpKPI) for Canadian ambulatory oncology pharmacists.

3. Summarize the merits and challenges of establishing and implementing “disease-specific” vs. “process of care” based cpKPI?

4. List potential Delphi controversial discussion topics that may arise to guide panelists with their voting preferences for cpKPI.

10 Step Process – Co-Creating Consensus Ambulatory Oncology cpKPI

1. Establish pre-Delphi consensus cpKPI definition
2. A priori consensus selection criteria (ideal attributes)
3. National call - candidate cpKPI
4. Literature Search – establish an inventory bank for candidate cpKPI & evidence summary tables
5. Evidence-informed cpKPI categories (areas of focus)
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9. 3 round Delphi process (with live meeting after round 2)
10. Final vote


What? Overall Goal of the National cpKPI Collaborative / National Consensus Process

To develop a core set of national clinical pharmacy KPI for inpatient hospital pharmacists via a systematic national evidence-informed consensus process

Why? Rationale for clinical pharmacy KPI (cpKPI)

GAP: currently NO established national or international consensus on what constitutes a KPI for clinical pharmacy services

Rationale: To advance practice toward desired evidence-informed patient outcomes

cpKPI will serve to better define minimum standards and permit benchmark comparisons within and between organizations

WHAT is a cpKPI? CLINICAL PHARMACY KEY PERFORMANCE INDICATORS  DEFINITION: FIVE PILLARS

1. Reflect a desired quality practice
2. Links to direct patient care
3. Links to evidence of impact on meaningful patient outcomes
4. A pharmacy/pharmacist sensitive measure
5. Feasible to measure

Hierarchy of Study Outcomes (AHRQ)

- Level 1: Clinical and QoL outcomes
  - Morbidity, mortality, adverse events
- Level 2: Surrogate outcomes
  - I.e. blood glucose, blood pressure, cholesterol
- Level 3: Measurable variables with an indirect or unestablished connection to target outcome
  - I.e. medication disease state knowledge
- Level 4: Indirect variables
  - I.e. patient satisfaction, “potential adverse events”

Ambulatory pharmacy metrics

Schmidt L. et al Am J Health-Syst Pharm. 2017; 74e76-82

- Growth of pharmacist’s services in ambulatory care settings
- Gap: No established international consensus indicators

Ambulatory pharmacy metrics

Schmidt L. et al Am J Health-Syst Pharm. 2017; 74e76-82

What are the options of metrics to gauge impact that pharmacists have on patient care?
1. Direct clinical outcomes (calculating hospitalization or disease exacerbation)
2. Indirect measure of clinical outcomes
   1. Lab values within a goal rate
   2. Pharmacist Intervention rates
   3. Compliance with guideline recommendations
   4. Patient medication adherence rates
   5. Efficiency and satisfaction scores (patient experience)
3. Other
   1. Adverse event rates, intervention rates, clinical outcomes, hospitalization or readmission rates, adherence
Ambulatory pharmacy metrics

Challenges:
1. Labour intensive manual data collection
2. Different clinics often use different metrics and apply them inconsistently
3. Individualized nature of metrics in use was a barrier to generalization across clinics

How? - Implementation of Performance Metrics to assess pharmacists' activities in ambulatory Care
Schmidt L. et al Am J Health-Syst Pharm. 2017

Focal points for Metric Developments (Milwaukee, WI)
- Pharmacists provide services in 11/159 clinics
1. Pharmacist Interventions
2. Cost Avoidance
3. Patient Satisfaction

Question 5 - Application to Ambulatory Care
Which one strategy can reduce 30–Day re-hospitalization when implemented alone?

a) “home visit”
b) “patient education”
c) “follow-up telephone call”
d) “medication reconciliation”
e) None of the above

Interventions to Reduce 30-Day Re-hospitalization: Systematic Review

Interventions to Reduce 30-Day Re-hospitalization: A Systematic Review

Interventions to Reduce 30-Day Re-hospitalization: Systematic Review

Interventions to Reduce 30-Day Re-hospitalization:
Systematic Review
How To Identify & Select cpKPI: Slavik -11- Consensus Criteria – Ideal Attributes

Based on high quality literature evidence (e.g. Observational data vs. RCT vs. systematic review)

Relevant impact on clinically important outcomes (e.g. Surrogate versus clinical endpoints, effect size of intervention)

Best-suited to pharmacist’s role (e.g. Identifies pharmacist-specific clinical role vs. GP vs. RN)

Attributable to direct patient care (e.g. Marker of clinical intervention, not distribution)

Specific to pharmaceutical care process (e.g. Related to generally-accepted PC processes)

Aligned with professional goals, objectives, practices (e.g. Accreditation Canada ROPs, standards, CSHP Vision 2015, etc.)


How To Identify & Select cpKPI: Slavik -11- Consensus Criteria – Ideal Attributes

Accepted disease-based quality indicator (e.g. ACEI or BB for HF, VTE prophylaxis in hospitalized patients)

Feasible to measure (e.g. Reliable measurement systems can/could be put in place)

Efficient to measure (E.g. Acceptable time commitment, useable)

Valuable quality measure (E.g. Prevalent, impactful problem with practical, proven interventions)

Generalizability (E.g. Versatile enough to be applied in large, academic and small community sites)


How ? Prepare Evidence Summary Tables

Discussion: specific group suggestions to modify or concur with the follow sections

- Strengths and Limitations
- Application/Synthesis: How does this study inform the cpKPI selection process (methods, cpKPI selection criteria, and candidate cpKPI)?
- What are the patterns (similarities and differences) compared to other key papers?

Purpose:
- used to refresh and focus outcome evidence for streamlining
- Used by Delphi panelists to support ranking and decision making

Bringing the evidence all together with extrapolation..........

Bond et. al. (2007) Observational Study
Clinical Pharmacy & Mortality
1. admission drug histories
2. medical rounds participation
3. CPR team participation

Kaboli PJ et al. (2006) Systematic Review
1. attendance on patient care rounds
2. patient interviews and assessments
3. medication reconciliation
4. discharge “counselling” (patient medication education)
5. follow-up after discharge

RCT Outcome Findings
Gillespie U et al 2009- RCT
Integrated Intervention pharmaceutical care Integrated Intervention
1. post-discharge hospital visits (ED + readmissions)
2. emergency department visits
3. drug related readmissions

Makowsky MJ et al. 2009- RCT
1. “overall quality score”
2. 3 and 6 month all-cause readmission (hospital or ED visit after index hospital admission)

Chisholm-Burns MA et al 2010, systematic review w/ focussed meta-analyses
- HbA1c, LDL Cholesterol, Blood Pressure
- Adverse Drug Events

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Doucette 8- Consensus Critical Activity / Topic Areas

1. Pharmaceutical Care – Integrated (DTP assessment/ care plan/ monitoring)
2. Medication Reconciliation- BPMH/Med History Taking
3. Medication Reconciliation- Admission Reconciliation
4. Medication Reconciliation- Discharge Reconciliation
5. Team (or Patient) Rounds
6. Discharge Patient Education / Counselling
7. Post Discharge Follow-Up
8. Disease or Drug Specific – Best Practice Quality Indicators

HOW? Modified Delphi Process Methodology

A Delphi technique is a structured process commonly used to develop consensus healthcare quality indicators

It was developed to minimize influence from more vocal group members, and utilizes surveys or questionnaires instead of discussion.

frequently used with expert panels to generate consensus on healthcare issues

A modified Delphi technique used to arrive at consensus

This ‘modified’ technique is an iterative process that builds consensus using three rounds of anonymous panelist ratings with a live/team meeting

HOW? Delphi Rounds

A. Standardized Orientation
   • Audio PowerPoint + Mandatory Pre-Reading

B. Round 1
   • Demographic Information; Panelist ranks Semchuk 26 cpKPI, For each Slavik 11 and Overall Ranking, Suggest new cpKPI

C. Round 2
   • Review R1 aggregate summary/ report card for each cpKPI
   • Frequency Graphs Summary
   • Review anonymous qualitative comments
   • Panelist re-ranks all cpKPI

D. Live Meeting — Debate and Discussion to inform individual rankings
   • identify meet other panelists for the first time

E. Round 3
   - Review Feb 5 Live Minutes , R2 summaries (as above), Final Rankings

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Electronic Survey Instrument

**cpKPI #25:** Number (or proportion) of inpatients receiving venous thromboembolism (VTE) prophylaxis

Overall Rating: Measuring cpKPI#25 is useful in advancing clinical pharmacy practice to improve the quality of patient care


**cpKPI #30 (NEW):** Number (or proportion) of patients for whom clinical pharmacists have completed (executed/implemented) a pharmaceutical care plan.

Overall Rating: Measuring cpKPI#30 is useful in advancing clinical pharmacy practice to improve the quality of patient care


**FINAL 8 CANADIAN NATIONAL CONSENSUS cpKPI**

Composite mean Slavik 11 rating = 7.55; Overall rating mean = 7.62

- fernandes, o, gorman s, slavik r, semchuk wm, ...k toombs. [abstract] pharmacotherapy 2013;33(10):e208.
1. All Patients vs. Priority (High Risk) Patients?
   • Quick wins vs. complex patients

2. Documentation - What & Where?

3. Required Extent of Pharmacist Involvement?
   • Other HCP/Student/Staff involvement?

4. DTP Reporting
   • Sub-type & Severity?
   • High-Value Action DTPs?

5. Definitions:
   • *Active Participation* on *Inter-professional Rounds*?
   • *Pharmaceutical Care Plan*?
   • *In-Person* vs. *Discharge* Patient Education?
   • *Proactive Bundle* – Which cpKPI activities required?

**Top 5 : cpKPI Issues & Controversies**

**HOW? TO DO OR NOT TO DO?**

 gio merits and challenges of “disease-specific” cpKPI vs. “process of care”

 Example percentages of patients receiving ACEI post MI vs. percentages of patients receiving pharmaceutical care

 “high value action items” for this ambulatory ONCOLOGY.
**HOW? TO DO OR NOT TO DO?**

- merits and challenges of “disease-specific” vs. “process of care”

**Process of Care considerations:**
- Less liable to change month to month based on pharmacotherap trials
- Make a better reflection “pharmacist-centric” interventions
- Make more generalizable to heterogeneous pharmac practices

**GENE AL : cpKPI Issues & Controversies**

- Number and length of measurement
  -
  -
  -
- Documentation
  - What and where documentation must occur?
  - Patient chart vs. Pharmac record profile?
  - Card cop or electronic?
- Denominator
  - What is the denominator?
  -
  -

**GENE AL : cpKPI Issues & Controversies**

- Extent of Measurement
  -
  -
- Requirement of National reporting
  -
  -
- Students/Teachers
  -
  -

**SUMMARY: 10 Step Process – Co-Creating Consensus Ambulatory Oncology cpKPI**

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Questions

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