Translating evidence from guidelines for remote symptom assessment, triage and support:

**COSTaRS Workshop for Nurses**
(Pan)Canadian Oncology Symptom Triage and Remote Support

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Outline

1. Role of telephone nursing care
2. New COSTaRS guidelines/protocols
3. Trying it
4. Tips for using them in practice
5. Using them within our oncology program
Background

• Oncology Symptom Management:
  – a safety issue for patients on treatment
  – patients often experience symptoms at home

• 54% of cancer nurses in Canada provide remote support: a link for patients to oncology experts (telephone, internet, email) (Macartney et al. 2012)

• Symptom clinical practice guidelines have variable quality; often not formatted for use in clinical practice (Macartney et al., 2012; Stacey et al., 2007; Stacey et al., 2013)
What are common symptoms you manage on the telephone?

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Competencies for Telenursing

- Excellent communication and collaborative skills
  - allow time for patient to answer, avoid jargon, don’t assume, don’t accept self-diagnosis without delving further, collect enough data
- Ability to function fairly autonomously
- Use of technology
- Documentation
  - of all calls
- Use of decision support tools
  - E.g., COSTaRS guidelines/protocols

(Rutenberg, 2009)
Oncology nurses are required to stay up-to-date

Practice Standards and Competencies for the Specialized Oncology Nurse (CANO/ACIO), 2006
• Care delivered to individuals with cancer and their families is based on
  • Principles of evidence-based practice
  • Best practice or available evidence
  – Nurse constantly updates her/his knowledge base (life-long learning)
  – Literature and research findings are applied into nursing practice
    (CANO/ACIO, 2006) Download

Canadian Nurses Association (CNA): Entry to practice Competencies
• Nurses use evidence-based health-related information
  (CNA) Download
CANO Practice Standards and Competencies

• **Standard 3: Management of Cancer Symptoms and Treatment Side Effects**
  The specialized oncology nurse integrates and applies knowledge (of cancer pathophysiology, disease progression, treatment modalities, treatment side effects and complication, and symptom problems) to assess, plan, implement and evaluate the outcomes of best practice/evidence-based care and other clinical interventions.

• **Standard 7: Professional Practice and Leadership**
  The specialized oncology nurse engages in critical thinking, integrates best practice/evidence-based knowledge, …exercises ethical judgment and advocates for changes when institutional policies fail to meet the needs of oncology patients.

(CANO/ACIO, 2006)
Principles for safe, competent, and ethical nursing telehealth services

- Telehealth nurses practice in province/territory where they are located and registered despite patient location
- Duty to provide care is established as soon as the nurse interacts with the patient
- All interactions must be documented (paper/electronic)
- To reduce liability risk, nurses in telehealth need practice environments that provide:
  - Clinical guidelines, standardized protocols, agency policies/procedures
  - Orientation and continuing education
- Nurses participate in research to inform and evaluate telehealth services

(CNA, Nov 2007) Download
Principles for safe, competent, and ethical nursing telehealth services

Provincial nursing guidelines:

- College of Registered Nurses of British Columbia, Telehealth (2011) Download
- College of Nurses of Ontario, Telepractice (2009) Download
- College of Registered Nurses of Manitoba, Telephone Consultation (2008) Download
- Association of Registered Nurses of Newfoundland and Labrador, Telephone Nursing Care: Advice And Information (2002) Download
What is COSTaRS

• **pan-Canadian Oncology Symptom Triage and Remote Support.**
  – Providing evidence-based protocols for nurses to assess, triage and guide patients in self-management of the symptoms they’re experiencing due to cancer treatments through remote support.

COSTaRS project:

• Goal: to enhance the quality of remote (e.g. telephone, email) symptom support by nurses

• Clinical practice protocols
  – guide/support remote patient care by nurses
  – narrow the know-do gap by:
    - presenting best available evidence
    - using a format sensitive to how nurses think and what nurses do

(Stacey et al., 2013)
How does COSTaRS align with goals in our Oncology Program

Our goals

• All nurses that are in contact with patients throughout their treatment journey to provide consistent, professional, evidence based nursing advice.

• Consistent and complete documentation

• Clinical practice protocols to guide and support nurses for better care
## The COSTaRS Team

<table>
<thead>
<tr>
<th>Name</th>
<th>Title/Degree</th>
<th>Location</th>
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<tr>
<td>A Saucier</td>
<td>RN, MScInf</td>
<td>Montreal, QC</td>
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## COSTaRS: 13 Symptoms

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Symptom</th>
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<tbody>
<tr>
<td>Anorexia</td>
<td>Febrile neutropenia</td>
</tr>
<tr>
<td>Anxiety*</td>
<td>Mouth sores/ stomatitis</td>
</tr>
<tr>
<td>Bleeding</td>
<td>Nausea/vomiting</td>
</tr>
<tr>
<td>Breathlessness/dyspnea</td>
<td>Peripheral neuropathy</td>
</tr>
<tr>
<td>Constipation</td>
<td>Skin reaction</td>
</tr>
<tr>
<td>Depression*</td>
<td><strong>Excluded:</strong></td>
</tr>
<tr>
<td><strong>Diarrhea</strong></td>
<td>Pain</td>
</tr>
<tr>
<td>Fatigue*/tiredness</td>
<td>Cognitive changes</td>
</tr>
<tr>
<td>(*primary source Cancer Journey Guideline)</td>
<td>Dysuria/hematuria</td>
</tr>
</tbody>
</table>

There were no guidelines available for dysuria and hematuria, or cognitive changes at the time of protocol development; a protocol is in development for Pain.

(Stacey et al., 2012)
What is a Protocol?
A framework to guide practice

• A source of information that orients the assessment and nursing action plan to adapt to a patient’s needs

• Supports a clinical decision taken by the nurse

• A decision support tool complements a nurse’s critical thinking skills and competencies BUT does not replace them

(American Academy of Ambulatory Care Nursing (AAACN), 2009; Cancer Care Ontario Nursing Professional Advisory Committee, 2004)
COSTaRS Symptom Protocol Template: 5 sections

1. Assessment of symptom severity (includes ESAS)
2. Triage patient for symptom management based on highest severity
3. Review medications being used for the symptom
4. Review self-management strategies (presented with motivational interviewing techniques) (Miller & Rollnick, 2002)
5. Summarize and document the plan agreed upon with the patient
A PROTOCOL IN DETAIL…
**Diarrhea Protocol**
Remote Assessment, Triage, and Management of Diarrhea in Adults Undergoing Cancer Treatment
(not for patients undergoing bone marrow transplant)

**Diarrhea:** An abnormal increase in stool liquidity and frequency over baseline (> 4-6 stools/day) which may be accompanied by abdominal cramping.\(^4,6,7\)

1. **Assess severity of the diarrhea** (Supporting evidence: 7 guidelines)\(^1-7\)
   Tell me what number from 0 to 10 best describes your diarrhea
   - No diarrhea 0 1 2 3 4 5 6 7 8 9 10 Worst possible diarrhea\(^9\)(ESAS)
   - How worried are you about your diarrhea? 7
     - Not worried 0 1 2 3 4 5 6 7 8 9 10 Extremely worried
   - Have you been tested for c-difficile? If yes, do you know the results?
     - Yes □ No □ Unsure □ Results □

<table>
<thead>
<tr>
<th>Ask patient to indicate which of the following are present or absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient rating (see ESAS above)(^9)</td>
</tr>
<tr>
<td>Patient rating of worry about diarrhea (see above)(^7)</td>
</tr>
<tr>
<td>Think about your normal bowel pattern. How many extra bowel movements are you having per day (including at night), above what is normal for you?(^1-7)</td>
</tr>
<tr>
<td>How would you describe your stools (colour, hardness, odour, amount, oily, blood, straining)?(^3,8,7)</td>
</tr>
<tr>
<td>Ostomy: How much extra output are you having, above what is normal for you?(^3-6)</td>
</tr>
<tr>
<td>Do you have a fever &gt; 38°C?(^3,4,8,7)</td>
</tr>
<tr>
<td>Do you have pain in your abdomen or rectum with or without cramping or bloating?(^3,8,7)</td>
</tr>
<tr>
<td>Does your diarrhea interfere with your daily activities at home and/or at work?(^3,8,7) Describe.</td>
</tr>
<tr>
<td>Do you have any other symptoms?(^3,4,6,7)</td>
</tr>
<tr>
<td>□ Nausea/vomiting</td>
</tr>
<tr>
<td>□ Loss of appetite</td>
</tr>
<tr>
<td>Are you feeling dehydrated, which can include feeling</td>
</tr>
</tbody>
</table>

**ESAS question**
Ask patient to rate severity on scale of 0 no diarrhea to 10 worst possible. May be asked at the end of assessment.
Rate severity and triage to highest level (use nursing judgment)

Make notes when patient speaking or for extra notes on the call
3. Review medications patient is using for diarrhea, including prescribed, over the counter, and/or herbal supplements (Supporting evidence: 6 guidelines)\(^1\)\(^-\)\(^5\)

<table>
<thead>
<tr>
<th>Current use</th>
<th>Examples of Medications for diarrhea</th>
<th>Notes (eg. dose, suggest to use as prescribed)</th>
<th>Type of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>Loperamide (Imodium(^{®}))(^1)(^-)(^5)</td>
<td>2mg post each loose bowel movement (max 16mg/day)</td>
<td>Systematic Review</td>
</tr>
<tr>
<td>☐</td>
<td>Atropine-diphenoxylate (Lomotil(^{®}))(^4)(^-)(^8)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐</td>
<td>Octreotide (Sandostatin(^{®}))(^1)(^-)(^6)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐</td>
<td>Psyllium fiber (Metamucil(^{®}))(^4)</td>
<td>1-2 tsp. per day</td>
<td></td>
</tr>
</tbody>
</table>

4. Review self-care strategies (Supporting evidence: 5 guidelines)\(^3\)\(^-\)\(^7\)

<table>
<thead>
<tr>
<th>What strategies are already being used?</th>
<th>Strategy suggested/education provided</th>
<th>Patient agreed to try</th>
<th>Self-care strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ☐</td>
<td>☐</td>
<td>☐</td>
<td>What helps when you have diarrhea? Reinforce as appropriate. Specify:</td>
</tr>
<tr>
<td>2. ☐</td>
<td>☐</td>
<td>☐</td>
<td>Are you trying to drink 8-10 glasses clear fluids per day (e.g. water, sports drinks, broth, diluted fruit juice)?(^3)(^-)(^7)</td>
</tr>
<tr>
<td>3. ☐</td>
<td>☐</td>
<td>☐</td>
<td>Do you know what kinds of foods you should be trying to eat? Suggest: applesauce, oatmeal, fruits, bananas, barley, boiled carrots, rice, white toast, plain pasta, well cooked eggs, skinned turkey or chicken, mashed potatoes, cooked or canned fruit without skin(^3)(^-)(^7) (high in soluble fiber and low in insoluble fiber) or are you trying to replace electrolytes (e.g. potassium and sodium or salt) that your body may be losing with the diarrhea by eating foods such as bananas and potatoes, drinking sports drinks or fruit smoothie, apricot nectar, or oral rehydration drink (1/2 tsp. salt, 6 tsp. sugar, 4 cups water)?(^3)(^-)(^7)</td>
</tr>
<tr>
<td>4. ☐</td>
<td>☐</td>
<td>☐</td>
<td>Are you trying to eat 5-6 small meals?(^3)(^-)(^5)(^-)(^7)</td>
</tr>
<tr>
<td>5. ☐</td>
<td>☐</td>
<td>☐</td>
<td>Are you trying to avoid lactose-containing products (milk, yoghurt, cheese)?(^3)(^-)(^6)(^-)(^7)</td>
</tr>
<tr>
<td>6. ☐</td>
<td>☐</td>
<td>☐</td>
<td>Are you trying to avoid alcohol and minimize caffeine ((&lt;2-3 servings)) (coffee, chocolate)?(^3)(^-)(^7)</td>
</tr>
<tr>
<td>7. ☐</td>
<td>☐</td>
<td>☐</td>
<td>Are you trying to avoid greasy/fried and spicy foods?(^3)(^-)(^7)</td>
</tr>
<tr>
<td>8. ☐</td>
<td>☐</td>
<td>☐</td>
<td>Are you trying to avoid large amounts fruit juices or sweetened fruit drinks?(^3)(^-)(^7)</td>
</tr>
<tr>
<td>9. ☐</td>
<td>☐</td>
<td>☐</td>
<td>Are you trying to avoid raw vegetables, whole grain bread, nuts, popcorn, skins, seeds, legumes?(^3)(^-)(^7) (Insoluble fiber)</td>
</tr>
<tr>
<td>10. ☐</td>
<td>☐</td>
<td>☐</td>
<td>Are you trying to keep skin around your rectum or ostomy dry?</td>
</tr>
<tr>
<td>11. ☐</td>
<td>☐</td>
<td>☐</td>
<td>Have you been keeping track of the number of stools you have had? If you have problems you should be watching for with your diarrhea? (listed above in assessment)</td>
</tr>
<tr>
<td>12. ☐</td>
<td>☐</td>
<td>☐</td>
<td>Would more information about your symptoms help you in taking appropriate information or suggest resources.</td>
</tr>
<tr>
<td>13. ☐</td>
<td>☐</td>
<td>☐</td>
<td>Have you spoken with a doctor or pharmacist about medication or possible side effects?</td>
</tr>
</tbody>
</table>

Engage patient by asking what they would agree to try

Guide patient in choosing self-care strategies (note number of guidelines)

NOTE: all these meds have strong evidence
5. Summarize and document plan agreed upon with caller (check all that apply):

- Patient agrees to try self-care strategies and if appropriate, medication use
- How confident are you that you can try what you agreed to do (0=not confident, 10=very confident)?
- Patient agrees to use medication to be consistent with prescribed regimen. Specify:
- Referral (service & date):
- Patient agrees to seek medical attention; specify time frame:
- Advise to call back in 12-24 hours if no improvement, symptom worsens, or new symptoms occur

If not confident, explore ways to support patient.

See guidelines used and available for more information.

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Tips for using COSTaRS protocols

- Start by listening to the patient
  - *the first 10-20 sec of interaction significantly impacts patients’ perceptions of nurses’ ability/desire to meet their needs*
- Tell the patient you want to ask them a few specific questions
- Get familiar with the protocols so you can go with the flow of the conversation rather than ask the questions word by word (Art of Nursing)
- Start with protocol for symptom most problematic for the patient
- Use good telephone etiquette (e.g., voice quality, listening skills, not being abrupt, not lecturing, avoid something in the mouth)
- Guidelines to inform each symptom protocol are listed in the references at the end of each protocol

(CCO 2004; AAACN 2009)
Case Scenarios

• **Fatigue/Tiredness Protocol** - Tom is a 40 year old man who has cancer of the rectum. He is undergoing concurrent chemotherapy and radiation. (5-fluorouracil with 20/25 radiation treatments done). He is complaining of severe fatigue that is limiting his daily activities and interfering with his quality of life.

• **Nausea/Vomiting Protocol** - Mary is a 65 year old woman undergoing adjuvant treatment for breast cancer with the FEC-D protocol. She has just finished her 2nd round of FEC. She calls with constant nausea and “a lot of vomiting”. She also states that she has questions about how to take her nausea medication prochlorperazine, and granisetron.

• **Skin Reaction Protocol** - John is a 50 year old man who has malignant neoplasm of base of tongue. He completed 30/30 radiation treatments last week to tongue and bilateral neck. He is calling complaining of sunburn like pain and redness to the neck as well as some open areas. He is wondering what to put on it. He is also having some difficulty swallowing.
Try it out – Role play exercise

• Get into groups of 2 to 3
  – 1 person is in the role of the patient
  – 1 person is in the role of the nurse
  – 1 person is in the role of the observer

• You have 5 minutes to simulate an interaction about a specific symptom

• Be prepared to discuss your experience
Debriefing

• ...

• ...

Pan-Canadian Oncology Symptom Triage and Remote Support (COSTaRS) Project
www.ktcanada.ohri.ca/costars
COSTaRS Protocols were Developed…

- Using quality rated clinical practice guidelines
  - If elements are missing, likely because no supporting evidence from guidelines

- To meet criteria for guidelines (AGREE II-rigour)
  - Make explicit the recommendations
  - Linked to evidence
  - Based on systematic review for guidelines
  - Reviewed by experts across Canada

- To be usable in practice beyond a resource on the shelf
- To integrate in electronic health record

- Using plain language – Flesch-Kincaid Grade 6.4

(Stacey et al., 2013)
What did nurses say?

• Overall:
  • clear, user-friendly, comprehensive assessment
  • very thorough yet concise
  • offers direction without needing to seek more info
  • excellent self-care strategies
• Process of using
  • tick boxes save excessive charting
  • easy to fill out when talking
  • clear differences between mild/mod/severe symptoms
• Links evidence to practice
• Applicable to nearly every cancer

(Stacey et al., 2013)
Potential barriers to consider when implementing the COSTaRS Protocols

- Lack of awareness the protocols exist
- Lack of flexibility/resistance to practice change
- Learning curve, requires practice and repetition
- May be perceived as “added work”
- Lack of easy access to the protocols
- Lack of formal education/training, resources
Potential facilitators to consider when implementing the COSTaRS Protocols

• Protocols are comprehensive, evidence-based, and relevant to oncology nursing practice
• Provides a standardized approach, potential for improved consistency in nursing practice
• Provide nurses with easy access to the protocols
• Provide nurses with adequate time to provide remote support, private area
• Provide education/training sessions on how to use the protocols
• Clear mandate/expectations required from organizational level, supervisors/managers
Process for using COSTaRS protocols and documenting calls

Note: the process for documenting calls needs to be tailored for each oncology program

At [add location]

• Process
  – ...

• Documentation
  – ...

www.ktcana.ca/costars
Key Messages

For good symptom management:

• Listen to the patient
• Assess the symptom in a thorough way
• Discuss evidence informed tips for managing symptoms
• Document the call

To make it a habit, practice using protocols daily
Learning Objectives

1. Describe elements of evidence-informed remote symptom support
2. Explain how to assess and triage patients' cancer treatment related symptoms
3. Discuss tailoring symptom self-care to patients' needs
4. Use evidence and theory-based protocols/practice guides for patients experiencing cancer treatment related symptoms
5. Review basic principles and conduct for remote support
6. Know how to document remote support
Workshop Evaluation
References Cited in this Presentation

- Association of Registered Nurses of Newfoundland and Labrador (2002). Telephone Nursing Care: Advice and information.
- Canadian Nurses Association (2007). *Telehealth: The role of the nurse* Ottawa, Canada
- Cancer Care Ontario Nursing Professional Advisory Committee (2004). *Telephone Nursing Practice and Symptom Management Guidelines*.
For more information…


