Promoting a culture of chemotherapy safety through e-learning in Pediatric Hematology Oncology

eCHEMO

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I do not have an affiliation (financial or otherwise) with a pharmaceutical, medical device or communications organization.

Je n’ai aucune affiliation (financière ou autre) avec une entreprise pharmaceutique, un fabricant d’appareils médicaux ou un cabinet de communication.
Mind the gap
eCHEMO: Promoting a culture of chemotherapy safety through e-learning in Pediatric Hematology Oncology
The SickKids context
Objective

To develop a **novel** curriculum for chemotherapy **competency** and evaluate its impact on trainees’ **confidence** and chemotherapy **safety** related behaviors.
Educational strategies

1. Flipped classroom E-learning

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Educational strategies

2. Simulation

3. Self-assessment

![Image showing a doctor working on a laptop]

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## Curriculum pillars

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<th>CanMEDS role</th>
<th>E-learning modules</th>
<th>Simulated learning</th>
<th>Self-assessment</th>
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<td><strong>Medical expert</strong></td>
<td>Content expertise</td>
<td>Practical application</td>
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<td><strong>Leader</strong></td>
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<td>Reflection on behavior</td>
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<td><strong>Scholar</strong></td>
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<td><strong>Professional</strong></td>
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<td>Group learning</td>
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</table>

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Results

12 incoming trainees completed chemotherapy certification
Results

8 completed the surveys
Results: prior training

25% had prior “training”
Results: prior experience

50% had prior experience prescribing chemotherapy
Results: perceived importance

100% agreed that chemotherapy teaching is an important part of PHO fellowship.
Results: Trainee confidence

Overall confidence in ability to order chemotherapy

- Not at all confident
- Slightly confident
- Somewhat confident
- Confident
- Very confident

Pre curriculum
Results: Trainee confidence

Overall confidence in ability to order chemotherapy

- Not at all confident
- Slightly confident
- Somewhat confident
- Confident
- Very confident

Pre curriculum vs Post curriculum
Results: Safety related behaviors

Take extra time to write orders

- More likely or a lot more likely
- Unchanged

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Results: Safety related behaviors

Minimize interruptions

- More likely or a lot more likely
- Unchanged
Results: Safety related behaviors

Double checking work

More likely or a lot more likely

Unchanged

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Results: Safety related behaviors

Use additional resources when writing orders

- More likely or a lot more likely
- Unchanged

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Impact on fellowship program

• Chemotherapy certification is now mandatory for all incoming trainees prior to treating patients

• *New* mandatory ‘practicum’ during first year, with competency checklist modeled after nursing certification

• Plans for sharing best practices, e-learning modules with other centres
Acknowledgements

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  • Breya Skinner

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