# Educational Approaches to Empower Future Healthcare Teams

<table>
<thead>
<tr>
<th>Curriculum Development Step</th>
<th>Example: Canadian Complex Care Curriculum</th>
<th>Your Educational Project</th>
</tr>
</thead>
</table>
| **1. Problem identification and general needs assessment**  
What is the scope of the problem (key articles in the literature)?  
What is the current approach to addressing the problem?  
What is the ideal approach? | - Pediatric residents lacked comfort in providing care for CMC and training gaps were identified; corroborated in literature (Bogetz et al., 2015).  
- Variable clinical exposure / educational opportunities in complex care across pediatric residency programs in Canada.  
- Ideally a standardized national curriculum in complex care should exist. |                                                                       |
| **2. Targeted needs assessment**  
Who are your target learners?  
What is the current learning environment? | - Target learners were residents enrolled in Canadian pediatric residency programs.  
- Needs assessment performed to identify gaps in training programs to address in a core curriculum (Sbrocchi et al., 2015). |                                                                       |
| **3. Goals and objectives**  
What are your 1-3 educational goals?  
What are specific, measurable, learning objectives? | - Curriculum goals and objectives modified in a competency-based format to align with CanMEDS 2015, in consultation with a RCPSC clinician educator.  
- Overarching goal: to enable future pediatricians to become competent in providing proactive, comprehensive, coordinated care for CMC. |                                                                       |
| **4. Educational strategies**  
What strategies will you use to achieve your learning objectives? | - Curriculum content aligned with learning objectives, structured as 4 modules.  
- Incorporation of active learning strategies to increase engagement and reflection; case-based teaching to promote transfer to a clinical context. |                                                                       |
| **5. Implementation**  
How will you garner institutional buy-in?  
What financial/other resources will you need?  
How do you plan to pilot/disseminate? | - Used Kotter’s 8-step process for implementing institutional change (see reverse).  
- Support sought from CPPD and CPS.  
- Site champions identified to review and deliver curriculum.  
- Pilot grant funding obtained. |                                                                       |
| **6. Evaluation**  
What outcomes will you evaluate?  
What data will you collect about the learners and the program? | - OSCE station developed to assess transfer of skills to a simulated clinical scenario.  
- Residents identify a concept in each module that will change how they care for CMC in their training / future practice.  
- Formative pre- and post-multiple choice and short answer questions to assess change in knowledge.  
- Modification of curriculum based on feedback. |                                                                       |


CMC = Children with Medical Complexity; RCPSC = Royal College of Physicians and Surgeons of Canada; CPPD = Canadian Pediatric Program Directors; CPS = Canadian Pediatric Society  
Kathleen Huth (University of Ottawa), Anne Marie Sbrocchi (McGill University) and Hema Patel (McGill University)
### Step for Leading Institutional Change

<table>
<thead>
<tr>
<th>Step</th>
<th>Example: Canadian Complex Care Curriculum</th>
<th>Your Educational Project</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Establishing a sense of urgency</strong>&lt;br&gt;How can you establish a sense of urgency around the need to achieve your educational project goals?</td>
<td>-Clinical need: recognized increasing clinic referrals for CMC, highlighting need for capacity-building for graduating pediatricians to care for CMC.&lt;br&gt;-Educational need: identified gaps in complex care training in residency training programs, reflected in RCPSC exam performance.&lt;br&gt;-Collected and presented this data and literature to institutional leaders.</td>
<td></td>
</tr>
<tr>
<td><strong>2. Creating the guiding coalition</strong>&lt;br&gt;Who should be a part of your team to help achieve your project goals? Consider key stakeholders, on-the-ground support, collaborators with shared objectives and needed skills.</td>
<td>-Partnership sought with leaders within RCPSC, CPS and residency programs for guidance and investment in curriculum development.&lt;br&gt;-Core team identified across institutions to perform needs assessment, review and implement curriculum.</td>
<td></td>
</tr>
<tr>
<td><strong>3. Developing a vision and strategy</strong>&lt;br&gt;What is the 1-sentence vision for your educational project? What strategy will you use to attain that vision?</td>
<td>-Vision of standardized training to empower future pediatricians to care for CMC; a curriculum that is nationally developed and disseminated.&lt;br&gt;-Strategy modelled after other curriculum development efforts through CPS.</td>
<td></td>
</tr>
<tr>
<td><strong>4. Communicating the change vision</strong>&lt;br&gt;How will you share your vision? Develop a simple/powerful message, share in multiple forums.</td>
<td>-Communicated vision and progress updates in multiple forums: CPPD annual meeting, CPS Complex Care Special Interest Group meeting, RCPSC evaluation committee meeting.</td>
<td></td>
</tr>
<tr>
<td><strong>5. Empowering others to act on the vision</strong>&lt;br&gt;What resources will you need to enable your team to achieve the project goal? Consider financial and administrative resources, training or expert consultation.</td>
<td>-Obtained grant funding and protected time to develop and pilot curriculum.&lt;br&gt;-Expert consultation from RCPSC clinician educator to advise team, providing guidance and resources.</td>
<td></td>
</tr>
<tr>
<td><strong>6. Generating short-term wins</strong>&lt;br&gt;How will your team and stakeholders recognize that investment in the project is “worth it” at an early stage?</td>
<td>-Successful publication of needs assessment generated feedback on the importance of the curriculum work.&lt;br&gt;-Positive feedback from pediatric residents on pilot implementation.</td>
<td></td>
</tr>
<tr>
<td><strong>7. Consolidating gains and producing more change</strong>&lt;br&gt;How will you sustain and build on your early successes in project implementation?</td>
<td>-Next steps: iterative improvements to curriculum as it is disseminated and evaluated across sites, ensuring accessibility of curricular materials to all residency programs through CPS / MedEdPortal.</td>
<td></td>
</tr>
<tr>
<td><strong>8. Anchoring new approaches in the culture</strong>&lt;br&gt;How you will embed your project in institutional culture?</td>
<td>-Next steps: incorporation of standardized curriculum into each Canadian residency training program’s academic schedule.</td>
<td></td>
</tr>
</tbody>
</table>


*CMC = Children with Medical Complexity; RCPSC=Royal College of Physicians and Surgeons of Canada; CPPD=Canadian Pediatric Program Directors; CPS=Canadian Pediatric Society*

*Kathleen Huth (University of Ottawa), Anne Marie Sbrocchi (McGill University) and Hema Patel (McGill University)*