Needs in Family Medicine
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Dave Dixon, BSc, MD, MCISc, CCFP, FCFP, Senior Advisor

Michael Brock, BSc, MSc, Educational Developer

Continuing Professional Development
Schulich School of Medicine & Dentistry, Western University
Faculty/Presenter Disclosure

Faculty: Dave Dixon

Relationships with commercial interests:
  None

Faculty: Michael Brock

Relationships with commercial interests:
  None
Learning Objectives

• Describe what a needs assessment is, and its role in education

• List a number of needs assessment strategies for determining both perceived and unperceived needs

• Summarize the formal Delphi needs assessment approach utilized by the department of Continuing Professional Development.
Discussion Questions

- What are you hoping to get from this session
- How do you use your identified needs

This line of questioning is considered a Needs Assessment!
What is a Needs Assessment?
Needs Assessments

• A systematic process to measure or determine the “gaps” in knowledge or abilities of a group

• Often used in the early stages of planning educational activities
What does this Group Need?

• Gathered information from four sources:
  1. Dr. Eric Wong, directly requested this topic for a talk
  2. Data from a survey-based needs assessment of this department
  3. Data from a SSMD faculty needs assessment
  4. Expert input (DRD) on potentially unperceived needs
Needs
Assessment
Theory
Educational Design

Content
- Learning Objectives
- Written Content

Implementation
- Pre
- Event
- Post

Evaluation
- Capabilities
- Needs
- Process
- Outcome
Even More Theory

Bloom’s Taxonomy

- **Remember**: Recognizing and recalling facts
- **Understand**: Understanding what the facts mean
- **Apply**: Applying the facts, rules, concepts, and ideas
- **Analyze**: Breaking down information into component parts
- **Evaluate**: Judging the value of information or ideas
- **Create**: Combining parts to make a new whole

Miller’s Pyramid

- **Knows**: Cognition
- **Knows how**: Professional Authenticity
- **Shows how**: Behaviour
Whose Needs?
The Perspective of Need

• All needs are perceived by someone
• Often over or under-perceived
• Defined by perspective
• Can be in competition with other needs
• Can relate to knowledge or process
Needs Provide Direction for:

Content
- Breadth (scope), Depth (Level), Finesse (use)
- Knowledge, Skills, Attitudes
- Focus/Personalization

Implementation
- Maximize “Bums in Chairs”
- Identify teaching methods

Assessment
- Relates to both needs and objectives
Education is Necessary but Not Sufficient for Change

Needs enhance the ability to provide:

• The right **content**
• For the proper **audience**
• Using their preferred **method**
What Needs Assessment Can I Use?
Assessing Needs

• How do you identify your student's needs?

Discussion (5 mins)
### Assessing Needs - Students

#### Individuals
- Self assessment
- Evaluation (summative, formative)
- Peer assessment
- Patient assessment
- Colleague assessment
- Performance data

#### Groups
- Group assessment
- Amalgamated assessments
- Educator identified
- Organization identified
Assessing Needs

• How do you identify learning needs of yourselves, and your fellow faculty members?

Discussion (5 mins)
Assessing Needs - Faculty

**Individuals**
- Audit
- QI
- New Innovations
- Assessments (Formal or informal)
  - Self, patient, co-workers, peers, 360
- Reflection
- Performance data
  - EMR, assessment

**Groups**
- Departmental / Organizational Mandate
- Analysis of practices
- Outcome assessment
- Community assessment
- Expert opinion (admin, peers)
- Data analysis (EMR, HER, ISIS, LHIN…)

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Schulich Medicine & Dentistry

Western
The Caveat with Self Assessment
Kruger-Dunning Effect
Example: Age-Gender Analysis

Age/Gender for Pod

Age/Gender for Provider

POD C Patients

DD Patients

Female  Male

DD-Female  DD-Male
Example: Pareto Charts (Billing Dx)
CPD’s Departmental Delphi Process
Needs Assessment

Aim: Identify educational needs of practitioners based on expert opinion and self-reports to influence future CPD initiatives for faculty and practitioners.

History: Pen & Paper, On-line, Ethics approved protocol
Delphi Process: Generic Methodology

Phase 1: Scientific committee
  Topic Identification

Phase 2: Multi-Round Educator
  Delphi Survey

Phase 3: Learner Survey

Phase 4: Distribution of Results
The Department of Anesthesia & Perioperative Medicine

Phase 1: Educational topics developed for “A Night On-Call”

Phase 2: Online Delphi of Anesthesiology Educators (N = 10)

Phase 3: Online survey for all Anesthesiology faculty (N = 34)

Phase 4: Deliver personalized reports to all participants highlighting topics of strength, and topics where educational opportunities exist.
Realize your role following a Significant complication (or death)

Employ point of care ultrasound (POCUS) to enhance patient care

Manage the "can't intubate, can't ventilate" scenario

Overall, topics that suited simulation-based education were highly desired (i.e. Emergency scenarios)
Individualized Learner Reports

Learner’s self-reported abilities Vs. their peers & educators

<table>
<thead>
<tr>
<th>Topic List</th>
<th>Strength</th>
<th>At Par</th>
<th>Opportunity</th>
<th>Priority Opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manage the &quot;can't intubate, can't ventilate&quot; scenario</td>
<td>X</td>
<td></td>
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<tr>
<td>Recognize and manage local anesthetic toxicity</td>
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<tr>
<td>Recognize and manage anaphylaxis</td>
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<tr>
<td>Identify and manage Malignant Hyperthermia</td>
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<td>Insert a cardiac pacemaker</td>
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Promotion of Self-Learning

• Needs assessment can serve as tools to:
  • Identify areas for future learning based on assessments (including self-assessments) of knowledge, competence or performance;
    • Individualized Learner Report
  • Develop a continuing professional development plan;
    • Individualized Learner Report
  • Aid in the identification of personally unperceived needs
In conclusion
Needs assessments

• A systematic approach – to capture “gaps” for a target audience

• A variety of techniques exist to capture individual or group needs

• Some techniques are more involved and scale to support desired outcomes
Questions?