Implementing Backwards Planning with Content Experts: Easier Than You Think

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July 22 and August 5, 2021
Implementing Backwards Planning with Content Experts: Easier Than You Think

Session 1: July 22, 2021
Laying a Solid Foundation: Defining Gaps, Root Causes, and Learning Objectives

Participants will use resources provided in this activity to improve their ability to:

1. Explain backwards planning process to planners and faculty
2. Use questions and examples with planners to define practice gaps and root causes
3. Write learning objectives which align with gaps and root causes and define outcomes measures

Session 2: August 5, 2021
Designing For Impact: Aligning Content & Instructional Tactics with Learning Objectives

Participants will use resources provided in this activity to improve their ability to:

1. Use questions to help faculty prioritize and organize content to align with learning objectives
2. Recommend optimal instruction strategies, formats, and design elements to content experts
Our CE System...

Big reach
- 1,680 CE providers
- 171,912 CE activities
- ~45 MILLION (!) learner interactions

A wide variety
- 8 CE provider “organization types”
- 13 CE “activity types” (including Other...which can really be ANYTHING!)

Some things in common
- **Improve** what someone is prepared to do, what someone does, and/or patient outcomes
- **Design** impactful activities using
  - Gaps and needs
  - Learning objectives
  - Design/formats
  - Outcomes
- **Collaborate** between CE pro(fessionals) and faculty/content experts

*ACCME 2020 Annual Report*
Backwards planning gathers crucial information about learning gaps and needs that will be used to develop more effective instructional design and evaluation strategies, based on cognitive and learning theory which will result in better and more measurable learning outcomes.
Steps in the Backwards Planning Process

Go to PollEv.com/hilaryschmid639

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### Instructional Design Backwards Planning Process Steps:

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#### A Common Challenge:
Working with Content Experts who are frequently not proficient in the Backwards Planning Process.
Case Study: Working with Content Experts in the Backwards Planning Process

- Headache Physician arrives at the CE Office - he wants to offer a 1 credit CE Program to “address significant gaps in the care of Migraine Patients”
- He tells you that “many HCPs don’t know enough about Migraine”. He says, “this deck is aimed at closing this gap”.
- He presents you with a deck of 66 slides and has written the following learning objectives:
  - Describe the epidemiology migraine (3 Slides)
  - Review the Pathophysiology of migraine headache, (4 Slides)
  - Overview of the differential diagnostic process and a list of tools that can be used (5 Slides)
  - Review the research on treatment options – with an emphasis on different MOAs and supporting Trials (35 Slides)
  - Describe research on emerging Tx options (10 Slides)
  - Review the guidelines for Tx of migraine (8 Slides)
  - Summary (1 Slide)

Has this happened to you? Enter Yes or No in the Chat

What’s wrong with this picture? Reflect on case and use the Chat to enter your ideas
What’s Wrong with this Picture?

Define Healthcare Gap
- Define gaps between desired healthcare outcomes & actual outcomes - based on healthcare data, literature, quality measures, etc.

Identify Root Causes
- Determine Root Cause(s)/Barriers, Performance Gaps underlying the Healthcare Gap
- What is preventing optimal care of patients?

Define Target Audience
- Define the appropriate target audience(s)? Who need what?

Write Learning Objectives
- Write competency-level objectives – What will HCPs do differently or more effectively to close the gap and overcome the Root Causes and Barriers? HCPs will improve their ability to do what?

Design How to Measure Achievement of LOS
- Determine how to assess if the learner’s have achieved proficiency in the learning objectives

Design Instructional Tactics to Improve Competence/Skills
- Select Content, Create formats, materials, demonstrations, activities, resources aligned with Root Cause(s) & Learning Objectives & appropriate for target audience

First 3 Steps are Missing: No information on Healthcare Gap(s), Root Causes, Target Audiences

Learning Objectives are Instructional Objectives
And were written before the first 3 steps
No Expected Outcomes are stated

Content was decided before defining Gaps and Root Causes – Likely way too much!
Entirely Passive 1 hr Lecture
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Step 1 : Defining the Healthcare Gap

The faculty says:

- There are “significant gaps in the care of Migraine Patients”
- Many HCPs don’t know enough about Migraine – I want to close this gap.”

A General Statement that gaps exist in not sufficient.
“Not knowing enough” - This is NOT a Healthcare Gap – it is a possible Root Cause.

A healthcare gap is a discrepancy between desired/expected healthcare outcomes and actual healthcare outcomes.

What questions could you ask to help identify the specific “significant” Gaps in the desired health outcomes of Migraine Patients? Use the Chat to Enter Ideas
Tip 1: Ask open-ended questions

CE Pro: Can you tell me more about the most important gaps in the care of migraine patients?

Content Expert: Multiple studies have shown that for 80% of migraine patients, it takes between 7-8 years to get an accurate diagnosis. This is way too long. HCPs don’t learn enough about Migraine in Medical School. And, these patients really suffer as a consequence and don’t benefit from available treatments that can prevent or inhibit migraines for way too long.

CE Pro: That is pretty startling. So you would hope that this activity will result in more timely diagnosis of migraine, and fewer misdiagnoses?

Content Expert: Yes – that is exactly what I would like to see. In addition, once Migraine is diagnosed, it is often undertreated or mistreated... But they have to get diagnosed first – this is what we need to focus on.
Instructional Design Backwards Planning Process Steps:

1. **DEFINE HEALTHCARE GAP**
   - Migraine Patients are frequently not diagnosed for 7-8 years, they are misdiagnosed

2. **IDENTIFY ROOT CAUSES**
   - Determine Root Cause(s)/Barriers, Performance Gaps underlying the Healthcare Gap
   - What is preventing optimal care of patients?

3. **DEFINE TARGET AUDIENCE**
   - Define the appropriate target audience(s)? Who need what?

4. **WRITE LEARNING OBJECTIVES**
   - Write competency-level objectives – What will HCPs do differently or more effectively to close the gap and overcome the Root Causes and Barriers? HCPs will improve their ability to do what?

5. **DESIGN HOW TO MEASURE ACHIEVEMENT OF LOS**
   - Determine how to assess if the learner’s have achieved proficiency in the learning objectives

6. **DESIGN INSTRUCTIONAL TACTICS TO IMPROVE COMPETENCE/SKILLS**
   - Select Content, Create formats, materials, demonstrations, activities, resources aligned with Root Cause(s) & Learning Objectives & appropriate for target audience
Step 1: Defining the Healthcare Gap Additional Tips

- **Tip 1:** Ask open-ended questions
  - Can you tell me more about the most important gaps in the care of migraine patients?

- **Tip 2:** Make suggestions - possible gaps, organized by “domains of care”
  - Diagnosis
    - Are patients misdiagnosed, are there delays in diagnosis, under-diagnoses, not being screened?
  - Treatment selection
    - Are there issues with undertreatment, overtreatment, failure to use most current drugs?
  - Monitoring and managing side effects
    - Are there issues with follow-up, adherence, treatment adjustments?

- **Tip 3:** Ask about or provide current literature about gaps in care

- **Tip 4:** Keep an ear out (for root causes/reasons why)
Instructional Design Backwards Planning Process Steps

1. **Define Healthcare Gap**
   - Migraine Patients are frequently not diagnosed 7-8 years, they are misdiagnosed

2. **Identify Root Causes**
   - Determine Root Cause(s)/Barriers, Performance Gaps underlying the Healthcare Gap
   - What is preventing optimal care of patients?

3. **Define Target Audience**
   - Define the appropriate target audience(s)? Who need what?

4. **Write Learning Objectives**
   - Write competency-level objectives – What will HCPs do differently or more effectively to close the gap and overcome the Root Causes and Barriers? HCPs will improve their ability to do what?

5. **Design How to Measure Achievement of LOS**
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6. **Design Instructional Tactics to Improve Competence/Skills**
   - Select Content, Create formats, materials, demonstrations, activities, resources aligned with Root Cause(s) & Learning Objectives & appropriate for target audience
Does anything here sound like a Root Cause?

**CE Pro:** Can you tell me more about the most important gaps in the care of migraine patients?

**Content Expert:** Multiple studies have shown that for 80% of migraine patients, it takes between 7-8 years to get an accurate diagnosis. This is way too long. HCPs don’t learn enough about Migraine in Medical School. And, these patients really suffer as a consequence and don’t benefit from available treatments that can prevent or inhibit migraines for way too long.

**CE Pro:** That is pretty startling. So you would hope that this activity will result in more timely diagnosis of migraine, and fewer misdiagnoses?

**Content Expert:** Yes – that is exactly what I would like to see. In addition, once Migraine is diagnosed, it is often undertreated or mistreated... But they have to get diagnosed first – this is what we need to focus on.
Step 2: Defining the Root Cause

Tip 5: Move beyond knowledge deficits using 5 Whys

**CE Pro:** Why do you think HCPs have such a hard time making a correct diagnosis for Migraine?

**Content Expert:** Primary Care doctors just don’t know enough about the epidemiology and pathophysiology. They frequently misdiagnose migraine as sinus or tension headaches.

**CE Pro:** Why do you think it is so confusing to differentiate these types of headaches, and how could you help HCPs avoid being misled?

**Content Expert:** Its confusing because some of the features are similar, and HCPs don’t have a lot of practice differentiating different types of headaches. They aren’t using migraine screening tools, and they don’t ask patients the right questions in the history. Moreover, they really underestimate the frequency and severity of Migraine.

**CE Pro:** That’s very interesting, so our learners need to learn more about how to differentiate headaches and use screening tools, and to ask the right questions.
Tip 6: Use A Fishbone Diagram to explore and organize ideas

Why are there so many mis-diagnoses of migraine

Equipment

Process

People

Materials

Environment

Management

Differential diagnosis is confusing
HCPs don’t know the pathophysiology etc.
HCPs don’t know the diagnostic criteria
Underestimation of frequency/severity

Don’t use screening
Don’t refer to Neuro

Migraine Patients suffer unnecessarily due to delays in making the diagnosis

IDENTIFY ROOT CAUSES

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Step 2: Defining the Root Cause Additional Tips

- Tip 1 (again): Ask open-ended questions
  - *Why* do you think HCPs have such a hard time making a correct diagnosis for Migraine?
  - What are the most common misdiagnoses for migraine?
  - How could you help HCPs avoid being misled?

- Tip 2 (again): Make suggestions beyond Knowledge deficits
  Possible root causes, focusing on skills and competencies
  - Are different types of Headache features confusing?
  - Are there any validated tools or checklists that HCPs could use to help converge more rapidly on the correct diagnosis of migraine?
  - Are HCPs not following guidelines for treatment?

Other types of root causes that Faculty may not have considered
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Step 3: Defining the Target Audience

Did this discussion of Root Cause reveal Targets?

CE Pro: Why do you think HCPs have such a hard time making a correct diagnosis for Migraine?

Content Expert: Primary Care doctors just don’t know enough about the epidemiology and pathophysiology. They frequently misdiagnose migraine as sinus or tension headaches.

CE Pro: Why do you think it is so confusing to differentiate these types of headaches, and how could you help HCPs avoid being misled?

Content Expert: Its confusing because some of the features are similar, and HCPs don’t have a lot of practice differentiating different types of headaches. They aren’t using migraine screening tools, and they don’t ask patients the right questions in the history. Moreover, they really underestimate the frequency and severity of Migraine.

CE Pro: That’s very interesting, so PCPs need to learn more about how to differentiate headaches and use screening tools, and to ask the right questions.
Step 3: Defining the Target Audience

Tip 7: Use Questions to Validate and Refine Targets

**CE Pro:** So you just indicated the PCPs have a high rate of misdiagnosis. Are there other members of the healthcare system who could benefit from this?

**Content Expert:** As a matter of fact, Ophthalmologists have the highest rate of misdiagnoses, and even neurologists miss the diagnosis 25% of the time.

**CE Pro:** You shared that the PCPs really need to use screening tools, ask specific questions, and learn to differentiate migraine from other types of headache. Do these same issues apply to Ophthalmologists and Neurologists as well?

**Content Expert:** Now that you mention it, PCPs and Ophthalmologists really have the same issues – but Neurologists should know this stuff – but is much more complicated for them. And I’m not sure why they miss the migraine diagnosis so much?

**CE Pro:** Ok. So it seems appropriate to really focus this activity on the PCPs and Ophthalmologists. Perhaps we can tackle your neurology colleagues when we have more insight into why they miss the diagnosis.
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Let's revisit our Content Expert’s Learning Objectives

- Describe the epidemiology of migraine (3 Slides)
- Review the Pathophysiology of migraine headache, (4 Slides)
- Overview of the differential diagnostic process and tools that can be used (5 Slides)
- Review the research on treatment options – with an emphasis on different MOAs (35 Slides)
- Describe research on emerging Tx options (10 Slides)
- Review the guidelines for Tx of migraine (8 Slides)
- Summary (1 Slide)

CE Pro’s Problem:
- These “Learning Objectives” are Instructional Objectives
- They were written before the Healthcare Gap, Root Causes and Target Audiences
- After exploration, they don’t align well with the refined focus of the activity

What would you do now? Enter your suggestions into the Chat.
Step 4: Defining the Learning Objectives

Tip 8: Write – or revise- learning objectives that align and ask the Content Expert to Validate

CE Pro: This has been so interesting and helpful. So you are really focused on the problem of migraine diagnosis, caused by PCPs & Ophthalmologists’ lack of knowledge and use of screening tools to diagnose and challenges they face in differentiating headache types.

Content Expert: Yes – that’s it!

CE Pro: Ok. So you anticipate that HCPs who participate in this program will improve their ability to:
   1) Use screening tools and ask questions to appropriately identify migraine,
   2) Accurately differentiate Migraine Headache from other headaches
   3) Refer to specialists in a timely manner.

Content Expert: Couldn’t have said it better myself!

CE Pro: Great. These LOs are really going to help us design the outcomes measures. I know you are headed to clinic – lets meet on Thursday August 5th at 2 pm EST. My colleague Chitra and a few of our friends will be there to help us continue the process – designing outcomes, selecting content and instructional tactics.
Instructional Design Backwards Planning Process Steps:

- **DEFINE HEALTHCARE GAP**
  - Migraine Patients are frequently not diagnosed for 7-8 years, they are misdiagnosed and undertreated

- **IDENTIFY ROOT CAUSES**
  - HCPs don’t know enough about Migraine, they don’t use screening tools, don’t refer, underestimate the frequency and severity of migraines and their impact on QOL and confuse migraine with sinus and tension headache

- **DEFINE TARGET AUDIENCE**
  - Primary Care Docs and Ophthalmologists have the greatest need

- **WRITE LEARNING OBJECTIVES**
  - Learners will improve their ability to 1) accurately differentiate Migraine Headache from other headaches, 2) use screening tools and ask questions to appropriately identify migraine, 3) refer to specialists.

- **DESIGN HOW TO MEASURE ACHIEVEMENT OF LOS**
  - Determine how to assess if the learner’s have achieved proficiency in the learning objectives

- **DESIGN INSTRUCTIONAL TACTICS TO IMPROVE COMPETENCE/SKILLS**
  - Select Content, Create formats, materials, demonstrations, activities, resources aligned with Root Cause(s) & Learning Objectives & appropriate for target audience
Session 1: July 22, 2021

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Session 2: August 5, 2021

Designing For Impact: Aligning Content & Instructional Tactics with Learning Objectives

Participants will use resources provided in this activity to improve their ability to:

1. Use questions to help faculty prioritize and organize content to align with learning objectives
2. Recommend optimal instruction strategies, formats, and design elements to content experts
Let’s recap some common pitfalls

- Sequencing – starting with tactics/formats, or with a list of topics
- Not understanding the root cause (or causes) of the problem
- Assuming knowledge is the gap (not considering skills and attitudes)
- Different learners – different needs
- Learning objectives a necessary evil (vs a tool)
- Teaching points or instructional objectives as learning objectives
Our Tips for the CE Pro...

- Tip 1: Ask open-ended questions
- Tip 2: Make suggestions
- Tip 3: Ask about or provide current literature about gaps in care
- Tip 4: Keep an ear out
- Tip 5: Move beyond knowledge gaps using 5 Whys
- Tip 6: Use a Fishbone Diagram to explore and organize ideas
- Tip 7: Use Questions to validate and refine targets
- Tip 8: Write – or revise - learning objectives that align and ask the Content Expert to Validate
### Q&A: Instructional Design Backwards Planning Process Steps

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