

Instructions to Case Authors

How to build and review cases as a team to ready them to be deployed for learners.

Harold “Skip” Garner

Cameron Sumpter

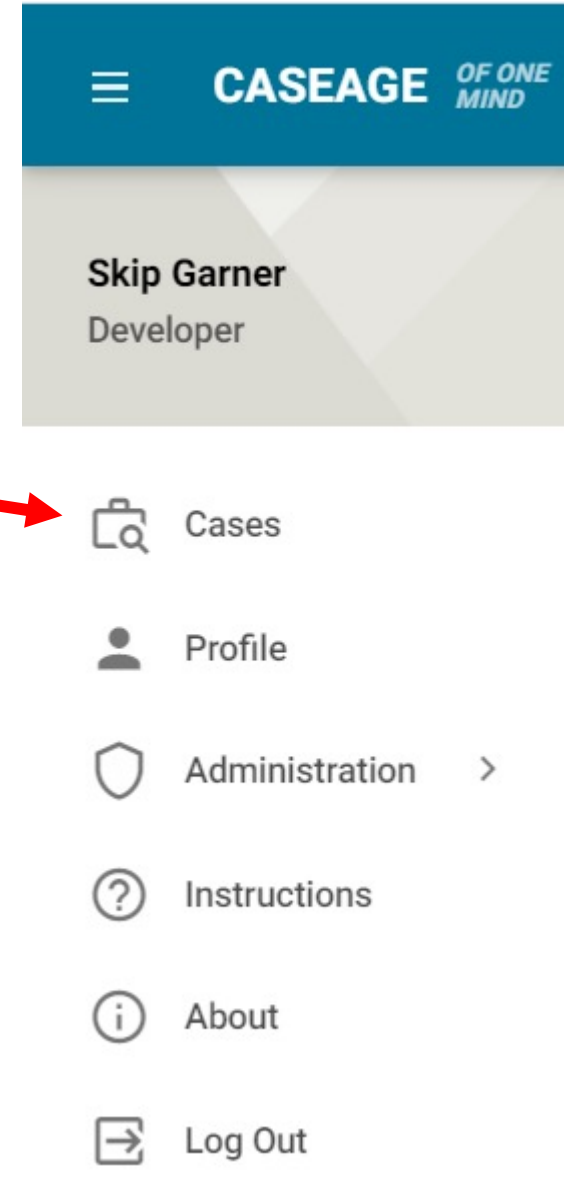
Sepehr Sohraby

What is CASEAGE?

- It is a case authoring tool
 - Coordinated, interactive authoring by teams of authors
 - Cases follow a uniform format with various components (from Learning Objectives to Clinical Plan), including:
 - Imbedded multimedia (images, videos, audio)
 - Authors control how case is dynamically presented using imbedded questions and how students answer them. Question are:
 - Have several types: Multiple choice, Fill-in-the-table, Free-text
 - Grading is automated
 - How many questions are answered, and number of 1st attempt answers are tabulated so student performance can be tracked
 - Cases, once developed and validated, can be deployed for students to use
- Students interact with cases dynamically inside CREDO
 - Students only see portions of a case until they successfully answer questions
 - How many questions are answered, and number of 1st attempt correct answers are tabulated so student performance can be tracked
 - Pasting answers not allowed, so students are encouraged to learn.

Building a case starts with....clicking on the CASEAGE menu under ViaLearning in CREDO

- **A listing of all cases in development or deployed, this is where you also create a new case**
- Some instructions on how to build a case
- Administrative control of case deployment and team interactions
- A bit more information about CASEAGE



First step in creating a case is to click on the ADD CASE button...

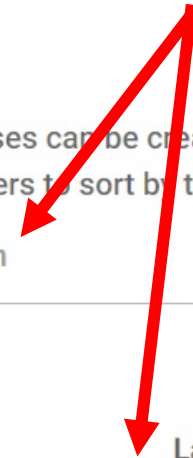
Search for a case, or sort list by column heading

CASES

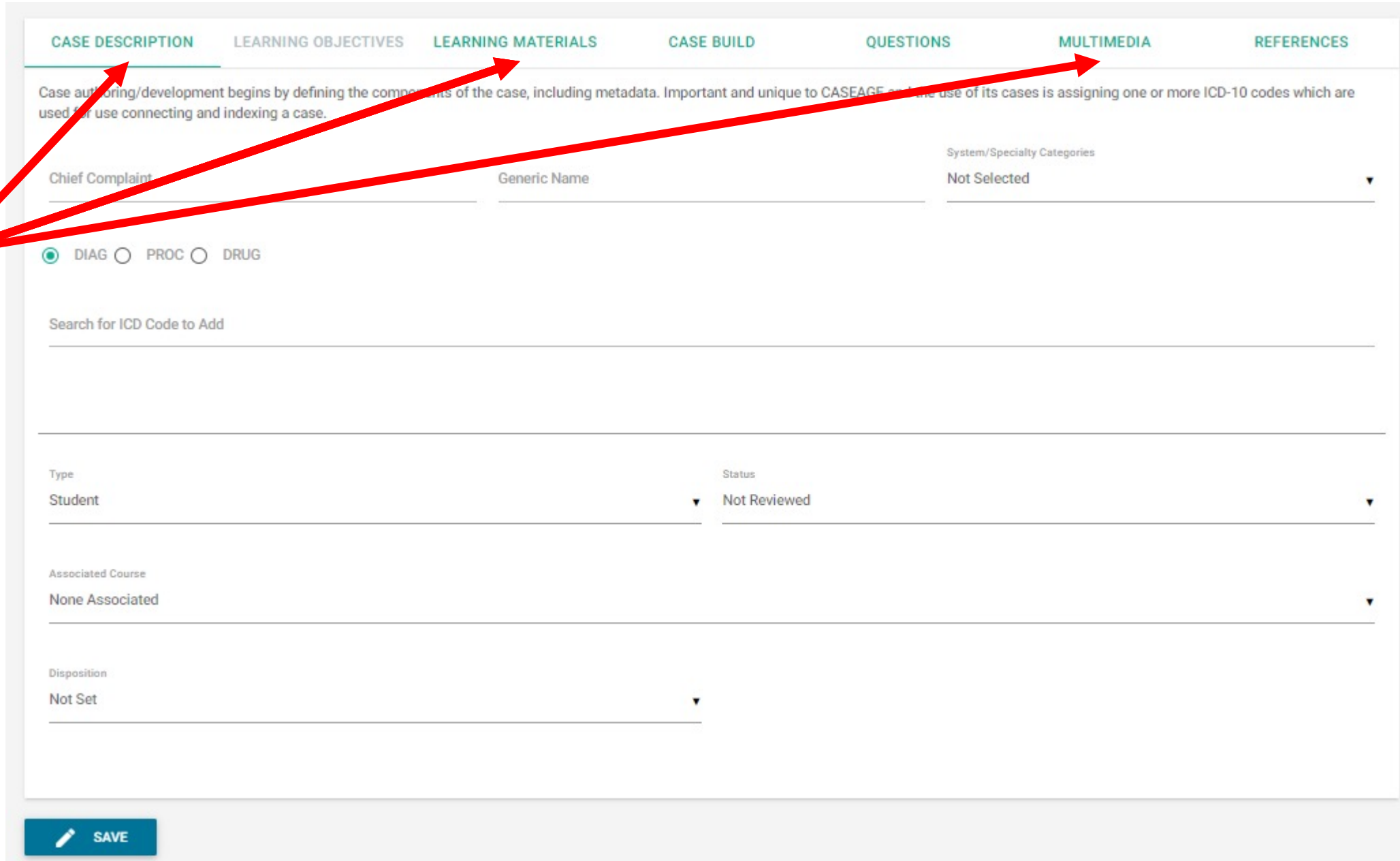
All cases that are in different stages of development, from early stages through deployed, can be found below. New cases can be created here using the 'Add Case' button. Use 'Search' to find a given case by name or assignee. Use the up/down arrows next to column headers to sort by the respective column.



ID	Name	Type	Disposition	Status	Creator	Builder	Reviewer	Last Updated	Last Reviewed
1	Sample Case	Student	Unknown	Retired	Sumpter, Cameron	Rawlins II, Fred; Sohraby, Sepehr	Garner, Skip	2020-07-12 04:24:30	2019-05-09 21:55:34
2	Case # 100 - Patient 39	VCOM Curriculum	Other Use	Reviewed	Sohraby, Sepehr	Sohraby, Sepehr	Sumpter, Cameron	2019-06-13 00:00:00	2019-06-13 22:06:22



Fill out the CASE DESCRIPTION form and save it.



The screenshot shows a web interface for creating a case. At the top, there are seven tabs: CASE DESCRIPTION, LEARNING OBJECTIVES, LEARNING MATERIALS, CASE BUILD, QUESTIONS, MULTIMEDIA, and REFERENCES. The CASE DESCRIPTION tab is selected. Below the tabs, there is a paragraph of text: "Case authoring/development begins by defining the components of the case, including metadata. Important and unique to CASEAGE and the use of its cases is assigning one or more ICD-10 codes which are used for use connecting and indexing a case." Below this text are several form fields: "Chief Complaint", "Generic Name", and "System/Specialty Categories" (set to "Not Selected"). There are three radio buttons for "DIAG", "PROC", and "DRUG", with "DIAG" selected. Below these is a search bar labeled "Search for ICD Code to Add". At the bottom of the form, there are three dropdown menus: "Type" (set to "Student"), "Status" (set to "Not Reviewed"), and "Associated Course" (set to "None Associated"). There is also a "Disposition" dropdown menu set to "Not Set". At the bottom left of the form, there is a blue button with a pencil icon and the text "SAVE". Three red arrows originate from a single point on the left and point to the "CASE DESCRIPTION" tab, the "LEARNING MATERIALS" tab, and the "MULTIMEDIA" tab.

At the top are the main sections in which case authors create the case content, upload multimedia and control the flow of the case when access by student users.

Upload text content and format the look and feel when the case is presented.

Click here to highlight information most often seen in board exams

Paste in text (including internet links)

....and then adjust the format of the presentation using these controls.

The screenshot shows a software interface for building a case. At the top, there are several tabs: 'CASE DESCRIPTION', 'LEARNING OBJECTI...', 'LEARNING MATERIA...', 'CASE BUILD' (which is selected), 'QUESTIONS', 'MULTIMEDIA', and 'REFERENCES'. Below the tabs, there is a text area with the instruction: 'Add components to the case from Case Presentation though Management Plan. The text can be associated with multimedia so that the case can be presented in a logical and informative way.'

Below this instruction, there are three text editors. The first one is titled 'Case Presentation' and has an information icon. To its right is a 'Board-Relevant' checkbox. Below the text editor is a rich text editor toolbar with icons for Bold (B), Italic (I), Underline (U), Strikethrough (ABC), Quote, Code, H1, H2, Bulleted List, Numbered List, Subscript (x₂), Superscript (x²), Indent, Outdent, Normal, Font Color (A), Background Color, Sans Serif font, and Text Color (Tx). The other two text editors are titled 'History' and 'Anatomy', each also with an information icon and a 'Board-Relevant' checkbox. Each text editor has its own identical rich text editor toolbar.

Red arrows point from the external text to the 'Case Presentation' text editor, the 'History' text editor, and the 'Board-Relevant' checkbox.

Create questions and distribute them throughout the case.







Click here to add a question

Click to open and edit a question, answer and logic

CASE DESCRIPTION LEARNING OBJECTIVES LEARNING MATERIALS CASE BUILD **QUESTIONS** MULTIMEDIA REFERENCES

A plurality of questions can be created and used for evaluating progress, grading and for releasing portions of a case when presented, thus making the case presentation dynamic and as a way of controlling the presentation of a case.

+ ADD MULTIPLE CHOICE **+ ADD TABULAR QUESTION**

No.	Section	Reference	Question	Continuation Policy	Edit	Delete
1	Case Presentation	Not Applicable	What is the most concerning feature of this patien...	Optional		
2	History	Not Applicable	Based on the patient's history and review of syste...	Optional		
3	Anatomy	Not Applicable	What layer is not included in the epidermis?	Optional		

Questions, answers and presentation logic are editable for each question.

Control case display reveal logic which depends on how the student answers the question.

MULTIPLE CHOICE QUESTION EDITOR

Question Text

What layer is not included in the epidermis?

Associated Section

Anatomy

Continuation Policy

▼ Question Optional ▼

- Question Optional
- Attempt Required
- Correct Response Required

External Link

References (One per Line)

ANSWER CHOICE A

Answer Text

Stratum corneum

Rationale / Explanation

The epidermis is divided into four layers: stratum corneum, stratum lucidum, stratum granulosum, and stratum germinativum.

Correct

ANSWER CHOICE B

Answer Text

Stratum lucidum

Rationale / Explanation

The epidermis is divided into four layers: stratum corneum, stratum lucidum, stratum granulosum, and stratum germinativum.

Correct

Encourage learning by providing rationale for correct and incorrect answers.

Tabular questions can have many rows and columns.

TABULAR QUESTION EDITOR

Question Text


Associated Section
Make a Selection

Continuation Policy
Question Optional

External Link

References (One per Line)

+ ADD ROW + ADD COLUMN

 SAVE

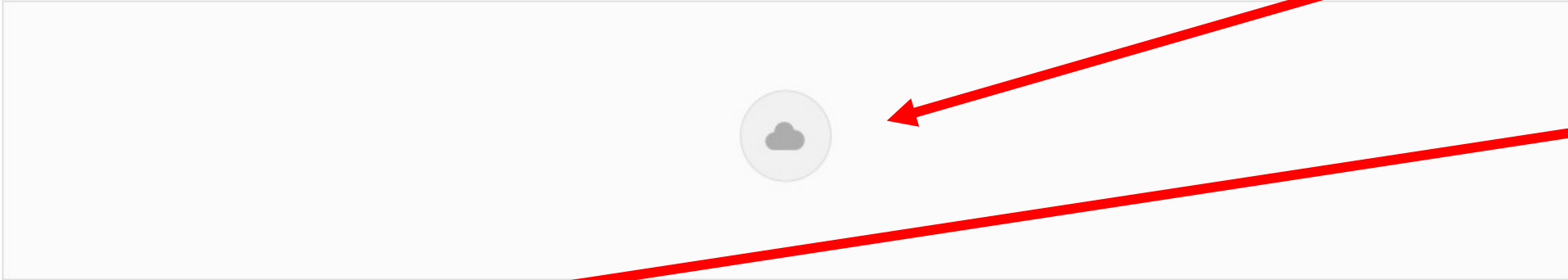
Tables can have answers that are text, numerical, and numerical range



A variety of multimedia types are supported.

CASE DESCRIPTION LEARNING OBJECTI... LEARNING MATERIA... CASE BUILD QUESTIONS **MULTIMEDIA** REFERENCES

Upload multimedia files and then associate them with various components of the case. Acceptable image file types include .jpg, .jpeg, .png; acceptable audiovisual file types include .avi, .mov, .mp3, .mp4. Drag-and-drop files into the upload area or tap/click to open a file selection dialog:



Section	Reference	Title	View	Edit	Delete
Case Description	Not Applicable	Lung x-ray			
Management Plan – Acute/Long-Term/Preventative	Not Applicable	CHOP Regimine			
Case Thumbnail	Not Applicable	Patient with neck lymphoma			

Drag and Drop multimedia files here to upload

Define section of case where multimedia is to be presented

...and view, edit and delete the multimedia

References, including hyperlinks can be distributed throughout the case.

CASE DESCRIPTION

LEARNING OBJECTI...

LEARNING MATERIA...

CASE BUILD

QUESTIONS

MULTIMEDIA

REFERENCES

List references used and assigned to components of the case throughout.

Edelman LS. *Social and economic factors associated with the risk of burn injury*. *Burns J Int Soc Burn Inj*. 2007;33:958–965.

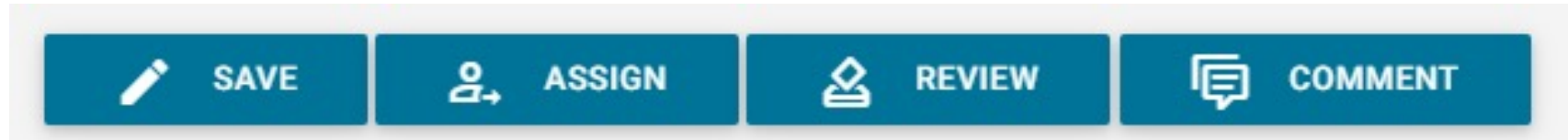
Smolle C, Cambiaso-Daniel J, Forbes AA, Wurzer P, Hundeshagen G, Branski LK, et al. *Recent trends in burn epidemiology worldwide: a systematic review*. *Burns*. 2017;43:249–257.

U.S. Department of Health and Human Services • Centers for Disease Control and Prevention • National Center for Health Statistics *National Hospital Ambulatory Medical Care Survey: 2017 Emergency Department Summary Tables*

McDermott KW, Weiss AJ, Elixhauser A. *Burn-Related Hospital Inpatient Stays and Emergency Department Visits, 2013: Statistical Brief #217*. 2016 Dec. In: *Healthcare Cost and Utilization Project (HCUP)*

Taira et al. (2010) Taira BR, Singer AJ, Thode HC, Lee C. *Burns in the emergency department: a national perspective*. *Journal of Emergency Medicine*. 2010;39(1):1–5.

CASEAGE supports coordinated team authoring



- Case creator controls which other authors can work on a case and what they are allowed to do.
- Authors can assign tasks for others and the team to do
- Case creator can assign authors to review and verify cases
- All authors can carry on any number of interactive messages/comments

When a case is complete and verified the case creator can deploy it.

The state of case development is controlled from the Case Description page.

A deployed case will appear in the View Cases in the ViaLearning menu in CREDO

The screenshot shows the 'CASE DESCRIPTION' tab of a case development interface. At the top, there are navigation tabs: CASE DESCRIPTION, LEARNING OBJECTIVES, LEARNING MATERIALS, CASE BUILD, QUESTIONS, MULTIMEDIA, and REFERENCES. Below the tabs is a descriptive paragraph: 'Case authoring/development begins by defining the components of the case, including metadata. Important and unique to CASEAGE and the use of its cases is assigning one or more ICD-10 codes which are used for use connecting and indexing a case.'

The form contains several fields:

- Chief Complaint**: A text input field.
- Generic Name**: A text input field.
- System/Specialty Categories**: A dropdown menu currently showing 'Not Selected'.
- Case Type**: Radio buttons for 'DIAG' (selected), 'PROC', and 'DRUG'.
- Search for ICD Code to Add**: A text input field.
- Type**: A dropdown menu showing 'Student'.
- Associated Course**: A dropdown menu showing 'None Associated'.
- Disposition**: A dropdown menu showing 'Not Set'.
- Status**: A dropdown menu with options: 'Not Reviewed', 'Reviewed', 'Validated', 'Deployed' (highlighted), and 'Retired'.

A red arrow points from the text on the left to the 'Deployed' status option in the dropdown menu. At the bottom left, there is a blue 'SAVE' button with a pencil icon.

Thank you

Any questions, comments or suggestions, please contact:

Harold “Skip” Garner

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