# Case Studies in Training and Education <br> Imaging Wisely: An introduction to the ACR Appropriateness Criteria® ${ }^{\circledR}$ and analysis of its impact on internal medicine trainees 

Mike K.W. Cheng MD ${ }^{a} \oplus$, Jessica M. Telleria-Cano $M D^{b}$, Julia B. Nath $M D^{c} \oplus$, Erin Y. Rieger $M D^{d} \oplus$, Annie Rhee $M D^{e}$, Joyce W. Tang MD, MPH ${ }^{f} \oplus$, Carina W. YangMD ${ }^{\text {g }} \circ \odot \oplus$<br>Show more $\vee$<br>$\alpha_{0}^{\circ}$ Share gy Cite

https://doi.org/10.1016/j.jacr.2023.04.012 ォ
Get rights and content $\nearrow$

## Section snippets

## Description of the Problem

Overutilization of diagnostic imaging is an increasing concern. In the United States, an estimated 50\% of all crosssectional imaging may not provide useful information for management [1]. This overuse contributes to increased radiation exposure, higher costs, and physical and psychological burdens from incidental findings. In 1993, the American College of Radiology Appropriateness Criteria® (ACR AC) were developed to enhance quality, maximize efficient imaging utilization and decrease...

## Program Description

We piloted "Imaging Wisely" with IM interns at the University of Chicago Medicine (UCM) from 2017 to 2018, introducing principles of high value image ordering utilizing the ACR AC. We analyzed post-curricular knowledge, attitudes, and practice pattern changes. "Imaging Wisely" was developed and co-facilitated by a multidisciplinary team (one each of IM and Radiology faculty, IM and Radiology trainee), pairing radiologists' content expertise with internists' contextual expertise. The curriculum (...

## Outcomes and Limitations

Our curriculum improved and sustained learner knowledge about highvalue image ordering. Post-curriculum, mean knowledge scores for appropriate ordering were significantly higher; the ACR AC was more frequently referenced during the open book assessments. Post-curriculum, more residents reported comfort with knowledge
of exam costs and discussing costs with patients, and rated the value of the ACR AC more highly. All residents rated the curriculum as helpful. Sustained improvement in knowledge...

## References (6)

M. Retrouvey et al.
radiologic knowledge and ordering habits of clinical residents: ACR Appropriateness Criteria Awareness and Perceptions
J Am Coll Radiol (2016)
K.Y. Wang et al.

Reducing inappropriate lumbar spine MRI for low back pain: radiology support, communication and alignment network
J Am Coll Radiol (2018)
M.S. Makary et al.

Single-center longitudinal implementation of lecture series based on the American College of Radiology Appropriateness Criteria for emergency medicine provider education
Curr Probl Diagn Radiol (2021)
There are more references available in the full text version of this article.

Cited by (0)

## Recommended articles (6)

## Research article

How should we measure success in atrial fibrillation ablation? The monitoring strategy depends on the outcome of interest
Heart Rhythm, 2023

## Research article

Actualités en assistance médicale à la procréation à la suite de la nouvelle Loi bioéthiquen ${ }^{0 \circ} 2021$ 107 du 2août 2021 : proposition de référentiel
Gynécologie Obstétrique Fertilité \& Sénologie, 2023

Research article
Challenging lead extraction with quadripolar active fixation of coronary sinus with severe adhesion HeartRhythm Case Reports, 2023

Aberrant bile duct communicating with the cystic duct: From early detection to management of late surgical complications
Hepatobiliary \& Pancreatic Diseases International, 2023

Research article
Letter to the Editor "The standard cephalomedullary nail: Answer to all unstable extracapsular proximal femoral fractures?" by Martí-Garín D, Fillat-Gomà F, Marcano-Fernández FA, Balaguer-Castro M, Murias Álvarez J, Pellejero R, Sánchez Fernández J, Torner P, Muñoz Vives JM. Feb, 2023, Injury
Injury, Volume 54, Issue 8, 2023, Article 110876

Research article
Oncocytic papillary cystadenoma in the paranasal sinuses presenting with high fluorodeoxyglucose uptake
European Annals of Otorhinolaryngology, Head and Neck Diseases, 2023

The authors state that they have no conflict of interest related to the material discussed in this article. XXX.

Dr Tang and Dr Yang contributed equally to this article.

View full text
© 2023 American College of Radiology

Copyright © 2023 Elsevier B.V. or its licensors or contributors.
ScienceDirect ${ }^{\circledR}$ is a registered trademark of Elsevier B.V.

ELSEVIER

