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OPEN PEER REVIEW

Comparison of the Unit Cost of Diagnostic Imaging Services Before and During the COVID-19 Pandemic Using the Activity-Based Costing (ABC) Method

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About this report

This open peer review (OPR) report shows the public comments made on this article during peer review, by the reviewers, the associate editor and the editor-in-chief, for every revision round, together with the authors' replies. Comments appear only with the consent of the people who wrote them. Reviewers who chose to sign their report are named; the others are shown as "Referee". Comments are edited for language only, and confidential remarks to the editors are not included.

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1 Original submission

0 comments

No public comments in this round.

2

Revision 1

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

The authors did not provide a point-by-point response to the reviewers' comments in this round.

2 Revision 1

1 comment · 18 Jun 2022

Editor-in-Chief

MAJOR REVISION 18 Jun 2022

Dear authors,
Your article needs Major Revision.
Regards

3

Revision 2

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Reviewer 1

1. Corrected according to instructions
2. *cross-sectional was deleted*
3. Finding presented as numbers along with comparing before and during COVID-19 values and p-value.
4. abstract Conclusion be in line with results application.
5. 5. Full text method:

5.1. written by subtitle

5.2. the number of services according to each diagnostic was described

5.3. Statistical analysis added to the method section

6. Tables 1 and 2 were merged. number of patients, mean and standard deviation of cost, and p-value for comparison of before and during COVID-19 difference were mentioned

Reviewer 2:

1-THE objective was added to abstract.

2- full term of abbreviations in abstract and paper were added

3- cross-sectional was deleted

- 4-the conclusion of paper was reviewed and It was completely rewritten

5- This article is aimed at calculating the unit cost of imaging services, in addition, profit and loss and other goals have been added.

6- As an assumption, to facilitate cost calculations the cost of buying imaging machines, equipment depreciation and the share of deposit benefits were excluded.

7-based on ABC method retrospective data can be used for calculations of unit cost

8- full term of abbreviations at the table footnote were added

9- full term of abbreviations at the table footnote were added

10- As shown in the method section, all costs both 2019 and 20121 in Rials have been calculated then both costs were converted to USD based on the exchange rate of 2021, in this way By converting costs into dollars in the specific year(2021), the effects of inflation are largely were been eliminated.

11- the perspective of this study is **provider** (here is hospital)

12- journal format in references were corrected

Reviewer 4:

Conversely and with great importance due to the lack of resources and budget, the results of this study are a very important step to planning and policy-making in the imaging sector. Thus, any service that has a higher cost can be Outsourcing to the private sector or any other decision to reduce costs

3 Revision 2

2 comments · 21 Jun 2022 – 22 Aug 2022

Referee 1 Reviewer

ACCEPT 21 Jun 2022

Thanks to the authors for the appropriate revisions.
Currently, this manuscript is suitable for publication in IJR.

Editor-in-Chief

MINOR REVISION 22 Aug 2022

Dear authors,
Your article needs Minor Revision.
Regards

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Revision 3

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Reviewer 3:

ref no 17 was cited in the ref part.

The correct is figure 2

Associate Editor 2:

1- capitalized the first characters of words in title

2-this part is unclear. Please its English writing style: “This study was conducted aimed to calculate ….”

Aimed was deleted

3- this part is unclear. Please its English writing style: “…. imaging ward of a big teaching shahid Rahimi hospital…..”

Was corrected

4-if the authors abbreviate a term, it is not necessary to introduce the term for the next time in footnote or in text. REVISIONS were made

5-in line 70, this part is unclear: “were been directly involved”. Please correct. Please get a consultation for English edit. Was corrected

6-please add the significant value of P [0.05??]=was added

7-please add the data of statistical software used in analysis and add the data of its manufacturer.

was added

8-in line 88 and 91 and table 1, please correct: CT. please correct the Ctscan to CT scan in figure 2 and 3 and 4

Was corrected

9-please put Mean±SD in tables in parenthesis (Mean±SD)

Were done

10-in table 1, please add space after of [Number of services]

Was corrected

11-please add abbreviation of USD in addition to UC and UP in figures 2 and 3.

It is added

12-in figure 4, the colors of D-2019 and D-2021 are similar. In addition, the colors of UC-2019 and UC-2021 are similar. It is better the authors choose different colors for various parts.

With a little attention we will see that every color is defined for a variable so that green color is defined for UC, blue color is for UP, and orange color is defined for D, THESE similar colors make easier comparisons between 2019 and 2021.

13-the authors have mentioned table 2 in text while it could not be seen in table.

It is figure 2

14-Reference 17 has been mentioned in text while it could not be seen in references.

It was added

15-in line 149, this part is unclear: “and it’s increased the costs except for CT scan services” in addition, the sentence in line 150 is unclear: “it seems correlate to the significant number of CT scan services performed during the pandemic.”

corrected

16-please delete “that” in line 152.

done

17-this sentence is unclear: “Of course, this action refers to the governmental based of the hospital and the radiology ward ……”

It was changed

18-please add “,” in appropriate places. Many parts need “,”.

Added

19-in line 160, please correct: “ …..managed. In other study…..”

corrected

20-in line 160, what is the meaning of bid? [big??]

corrected

21-in line 170, mount seems to be amount.

correct

22-line 175; “it seen to increase” is wrong.

It was changed

23-this sentence is unclear: “in other study this ratio about consumables is right”

It was changed

4 Revision 3

1 comment · 29 Aug 2022

Editor-in-Chief

MINOR REVISION 29 Aug 2022

Dear authors,
Your article needs minor revision.
Regards

5

Revision 4

AUTHORS' RESPONSE TO REVIEWERS

Authors' reply to reviewers

The next pages contain the authors' point-by-point reply to the comments of this revision round, as submitted with the revised manuscript. It is published as the authors wrote it.

Reviewer 1:

In line 171 your mentioned table 2 in the manuscript but does not exist the table in the article content .pls, correct it.

It is figure 2, corrected

> Associate Editor's Comments:

Associate Editor 1:

1-please write the data of SPSS manufacturer based on IBM site: https://www.ibm.com/support/pages/how-cite-ibm-spss-statistics-or-earlier-versions-spss

Added

2-in line 1760, the authors mentioned: “As the results show in table 1 and 2 the unit” while we don’t have table 2. If it is figure 2, please cortrect.

It is figure 2, corrected

5 Revision 4

1 comment · 3 Sep 2022

Editor-in-Chief

ACCEPT 3 Sep 2022

Dear authors,
Your article is acceptable for publication in IJR.
Regards