

Peer Review File

Article information: <http://dx.doi.org/10.21037/tau-20-944>.

Reviewer A

Interesting and timely article. Laborious work reviewing so many websites but shines a light on an important topic. Curious to see if increasing public awareness and publications such as this one will change the online price transparency landscape over the next several years.

Main comments

Comment 1:

US govt has certainly made movements towards increasing healthcare price transparency. Any recs for price transparency from reproductive governing bodies eg ASRM? Would pricing for male infert services be available online separately for fertility labs under the umbrella of a hospital as required by the upcoming HHS hospital price transparency rule? The executive order just made it through a lawsuit by AHA and is set to go into effect Jan 2021. Highlights the timeliness of the current manuscript.

Reply 1:

Private clinics are likely exempt from the hospital price transparency rule unless they are specifically part of a larger health system. No recommendations from the AUA or ASRM though ASRM did develop a 2015 summit and white paper to improve access to care including better price transparency. (see below hyperlinks)

<https://www.asrm.org/globalassets/asrm/asrm-content/news-and-publications/news-and-research/press-releases-and-bulletins/pdf/atcwhitepaper.pdf>

Changes in text: none

Comment 2:

Despite living in an ICMS, I find that many patients still do not understand their coverage or cost responsibilities. Not to mention the confusing application of the state-mandated insurance coverage. I would be curious if the IVF center websites mention local coverage and "typical" participating plans. I find that to be one of the biggest barriers in a couple's infertility care (the Medicaid couple, for example, referred to me for NOA only to find out that IVF is not covered even if mTESE were successful). Please be sure to mention the importance of mentioning and understanding local insurance coverage mandates or lack thereof in the Discussion -- it is essential to

understand IN PARALLEL with the price transparency.

Reply 2:

the reviewer is absolutely correct that the local insurance environment matter greatly. We did not specifically query this local participating plan coverage question, but most sites appeared to mention that they work with insurance in addition to any mention of financing plans.

Changes in text:

“The role of local insurance coverage also matters greatly, even in ICMS. Plans may cover different lifetime or yearly amounts for fertility care and each plan has different requirements in terms of out of pocket and copayments. Listing the price the clinic charges for sperm retrieval for example, is only part of the parallel process of defraying expenses through insurance.”

(Discussion section, paragraph 5, line 219-223)

Comment 3:

Be sure to maintain a clear focus throughout the manuscript on male infert services as noted in the title and intro. (potentially change the order)

Reply 3:

The structure of our paper was designed to start broad with IVF services in general, then to narrow down to the male-specific services. We feel that beginning with the results and discussion of IVF services in general allows for a frame of reference that really highlights the poor transparency for male specific services.

Changes in text:

brought forward discussion section of male services

Comment 4:

Though it may not be feasible, I would be curious how easily prices could be requested for those sites noting that a quote could be requested or rates were available by phone. If available, please reference the number of sites that offer pricing via these alternative methods.

Reply 4: We did not collect data on the clinics that required a phone call or another alternative method for quotes on the prices of services. This suggestion will be placed into the discussion as a component of future investigations.

Changes in text:

“Future investigations may include price transparency from simply calling the clinic to receive a quote on the price of services available by phone but not online.”

(Discussion section, paragraph 8, lines 241-243)

Specific comments:

Comment 5:

Page 4, line 80: Would change "semen preservation" to "sperm cryopreservation"

Reply: Noted

Changes in text:

Semen preservation changed to semen “cryopreservation”

(Introduction section, paragraph 1, line 124)

Comment 6:

-Page 7, line 155: Univ vs non-univ price transparency differences mentioned but was this stat significant?

Reply 6.1:

No statistical significance was reported. Thank you for bringing this to our attention. We decided to run a chi-square analysis on price transparency for university and non-university associated clinics. 7 out of 54 university clinics reported prices, and 82 out of 307 non-university clinics reported prices. This is statistically significant ($p = 0.031$).

Changes in text 6.1:

“This was statistically different from the 26.7% (82/307) non-university associated clinics that reported price data ($p=0.031$).”

(Results section, paragraph 1, lines 161-162)

Reply 6.2:

Reviewing this comment, we identified that our chi-square analyses for price transparency of male and female related services in ICMS and non-ICMS was accomplished using 383 for a total number of data points. While this was the total number of clinics listed on the SART website, only 361 clinics had websites available. Because we ran most of our calculations with 361 as a total ‘n’ we decided to remain consistent with these calculations. 13 clinics in non-ICMS and 9 clinics in ICMS did not have websites. We adjusted our calculations to match the reductions. See below

changes in text for specific details on the changes that this caused. The statistical significance for univ. vs. non-univ. was completed using data for the 361 clinics with websites.

Changes in text 6.2:

For IVF cycle specific services in ICMS, 26/203 changed to 26/194 and 12.8% changed to 13.4%.

(Results section, paragraph 3, line 176)

For IVF cycle specific services in non-ICMS, 25/180 changed to 25/167 and 13.9% changed to 15.0%. Percentage changes are seen in the discussion section as well.

(Results section, paragraph 3, line 178)

(Discussion section, paragraph 4, line 214)

The change in the number of data points for clinics in and out of ICMS caused a change in the p-value from 0.756 to 0.670.

(Results section, paragraph 3, line 180)

For male specific infertility services, 6/203 clinics in ICMS changed to 6/194 and 3.0% changed to 3.1%. 7/180 clinics in non-ICMS changed to 7/167 and 4.0% changed to 4.2%.

(Results section, paragraph 4, line 182)

(Abstract section, results, line 88)

The change in the number of data points for clinics in and out of ICMS caused a change in the p-value from 0.615 to 0.576.

(Results section, paragraph 4, line 184)

Reply 6.3:

Furthermore, we added a statement to the Methods section clarifying the fact that 361 out of 383 clinics listed on the SART website had functional webpages and that we used 361 for our calculations. This allowed us to be more concise in our results.

Changes in text 6.3:

“Of the 383 clinics listed on the SART website, 361 clinics had webpages. Thus, 361 total clinics was used for statistical purposes.”

(Methods section, paragraph 1, lines 132-133)

Removed “of the clinics with websites”

(Results section, paragraph 1, line 163 and line 165)

Comment 7:

-Page 8, line 164: Consider mentioning AUA and/or ASRM guidelines for SA testing in sentence "all men have a SA done at least once"

Reply 7: We agree that the above statement needs a reference. We decided to use ASRM guidelines from the following source:

Practice Committee of the American Society for Reproductive Medicine. Diagnostic evaluation of the infertile female: a committee opinion. Fertil Steril. 2015;103(6):e44-e50. doi:10.1016/j.fertnstert.2015.03.019

Changes in text:

Added above citation to References section, lines 309-311

Comment 8:

-While I appreciate the comments in the Acknowledgements, this section is typically limited to acknowledging contributions from individuals or sources who did not meet the requirements to be listed as an author -- please tailor this section.

Reply 8:

Noted. Deleted majority of acknowledgements but left acknowledgement to SART.

Changes in text:

Acknowledgments section, lines 263-270

Reviewer B

I would like to thank the authors for submitting this nice manuscript, highlighting a new concept of implementing transparency in prices of all fertility-related tests and procedures. The manuscript has included all registered labs and registered test centers nationwide. A great task indeed. Weaknesses, gaps, and limitations have been highlighted and must be tackled by officials and physicians in charge of the societies. A future project would be to extend that to other urological procedures too. No comments to add; well-written paper. Thank you.